

## CS China Energy Update Serving the U.S. Business Community

#### December 2009 – Issue 5

#### CS China Energy Update

is a monthly 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 market, project alerts, highlights from the U.S. Mission in China and U.S. Department of Commerce and U.S. Government activities in the sector, and a listing of upcoming events.

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## Guest Contributions

The U.S. Commercial Service in China welcomes contributions from guest authors and other organizations. The views and opinions of guest contributions do not necessarily represent those of the Commercial Service or U.S. Government. Inclusion does not represent or imply endorsement of the individual or organization. If you are interested in contributing, please contact Michael Wang at Jianhong.Wang@mail.doc.gov.

#### China and the US: The potential of a clean-tech partnership Only a collaboration between the two countries will create an environment where clean-energy technologies can thrive.

#### By Jonathan Woetzel

#### Source: Climate Change Special Initiative

China and the United States, the world's dominant producers of carbon emissions, have adopted aggressive programs to reduce oil imports, create new clean-energy industries and jobs, and generally improve the environment. But the environment that will be most critical to making or breaking the two countries' efforts to curb the dangers of global warming could well be the market that they jointly create in pursuit of their aims. Unless the two work together to provide the scale, standards, and technology transfer necessary to make a handful of promising but expensive new clean-energy technologies successful, momentum to curb global warming could stall and neither country will maximize its gains in terms of green jobs, new companies, and energy security.

The risk is real. Electrified vehicles, carbon capture and storage (CCS), and concentrated solar power, among other emerging "green tech" sectors, will need massive investment, infrastructure, and research to get off the ground. While the Chinese and US governments, along with private investors, are pursuing all of these technologies, they cannot achieve separately what they could jointly.

#### China and the US: The potential of a clean-tech partnership

#### Cooperation between China and the United States could make clean technology feasible.

Whether collaborating formally or informally, China and the United States working as a group of two (or G-2) dedicated to climate change would boost these technologies and deliver benefits that would accrue to all nations. Clean-energy solutions are critical for reducing the amount of harmful greenhouse gases produced not only by the two highest-emitting nations but also by countries worldwide. For instance, if the majority of vehicles on the world's roads by 2030 were hybrids and battery-powered vehicles, they would generate 42 percent fewer emissions than if all cars continued to run on today's gas and diesel engines.<sup>1</sup> But such reductions won't occur—won't even come close to happening—unless China and the United States lay the groundwork to make it so.

A global electric-car sector must start in China and the United States, and it must begin with the two countries jointly creating an environment for automotive investors to scale their bets across both nations. Private companies in China and the United States will most certainly compete to make the products, including electric-drive (or hybrid) vehicles, batteries, charging stations, and so on. But the two governments can no doubt create the conditions for both of them to succeed—for example, by setting coordinated product and safety standards across the two markets, funding the rollout of infrastructure, sponsoring joint R&D initiatives in select areas (such as new materials for car parts),

ensuring that trade policies support rather than hinder the development of a global supply chain for the sector, and providing consumers with financial incentives to buy the new models. More immediately, the two governments could pick matching cities in China and the United States for electrified-vehicle pilots that could be used to collect standardized data on real electrified-vehicle consumer adoption, infrastructure costs, and driving conditions that could then be shared with companies in both nations.

This new sector will require scale to succeed—more scale than could be found any time soon in either country alone. Electrified vehicles may one day become a viable market within both nations, but that day will arrive much more quickly if the two countries collaborate to create a market that is bigger and more attractive. In building this market, China and the United States would also ensure that the companies and jobs associated with it would be created in both countries sooner. Oil consumption will fall more quickly as well: today, about 50 percent of China's oil imports—and 80 percent of America's—are used to fuel vehicles. In other words, one plus one would equal three. Such momentum would also likely spark Europe into competing in a global electrified-vehicle industry faster.

CCS is another technology whose success needs the scale that only China and the United States can create together. Adapting CCS technology to coal-fired plants to capture the emitted greenhouse gases is expensive. CCS technology also uses a lot of energy to capture the emissions, thereby making plants less efficient. And fundamental questions about how the captured emissions are to be stored still need addressing. Neither nation is pursuing this expensive, uncertain emissions reduction technology quickly, but they would improve their chances and their options if they pooled costs and knowledge.

Together, the two governments could fund demonstration plants in China and the United States, jointly evaluate technologies available from vendors, set standards, and drive down costs. By using the pilot plants as research labs to learn more about the challenges CCS faces and how to overcome them, the governments could share the information with companies entering the CCS business, advancing learning in this industry at a quicker pace. Assuming engineers find solutions to the technical and storage hurdles, we estimate that by 2030 this technology could "clean" 17 percent of coal power in the United States and 30 percent of China's coal power, reducing total combined emissions by as much as 7 percent—a significant benefit to both nations and to the world.

Concentrated solar power (CSP) might not even *have* a future without joint action by China and the United States. As an emerging technology, CSP requires both technical progress and massive investments that only the largest economies can support. CSP technology uses sunlight to create and store steam power to drive turbines that transmit electricity on a larger scale more easily than they could using photovoltaic technology (which uses flat-screen receptors that turn sunlight into power). If clean concentrated solar power is scaled to generate 22 percent of total power in China and the United States by 2030, it could create over half a million jobs in each country. Setting common standards, coinvesting in pilot projects and R&D, and undertaking other joint initiatives are the way to get this started.

There are other benefits to joint action on clean energy besides reducing oil imports, cleaning up the air, and creating jobs. Cooperation on tangible actions that result in positive improvements for each country could help to foster trust between governments that have real differences on other political and economic issues. In addition, meaningful reductions in oil consumption by the world's two largest importers of oil could ease pressure on future global supply and demand imbalances of the fossil fuel.

It won't be easy for countries and companies to work in common to make these technologies real. The challenges to cooperation are numerous. Companies in both nations will be wary about what information they share with partners and competitors. Real cooperation between the two countries on technology initiatives is limited, so both sides will have to work hard to build relationships. In addition, they will need to create institutional frameworks for implementing and managing projects, as well as cofinancing mechanisms, partnership rules, and governance models. US companies will be concerned about protecting the intellectual property (IP) technologies that they use in pilot projects in China. The two governments will need to cleanly separate bilateral initiatives on clean-energy development from broader, multilateral agreements on emissions reductions. The list goes on.

But none of these challenges are showstoppers. Negotiations between the two countries could address nearly all these issues comprehensively. Even the thorniest—IP protection—is manageable. Because companies from many nations would contribute to making these three big technologies a success, IP agreements should be international. On that front, China will need to improve its ability to enforce global IP rules. Most critical, however, is the leadership that will be needed to surmount these obstacles. A commitment at the top levels of both governments to set a joint course for making these technologies real would be the signal of a real beginning. From there the impulse for collaboration may well filter down through the public and private sectors in the two countries to make research, investment, and policy a cooperative agenda.

#### About the Author

Jonathan Woetzel is a director in McKinsey's Shanghai office.

#### OVERCAPACITY IN CHINESE WIND TURBINE MANUFACTURING SECTOR AND THE IMPLICATIONS IN CHINA AND BEYOND Contributed by HIS CERA

With its soaring wind power capacity growth of the past few years, China is the world's second largest market for wind turbines. Chinese turbine manufacturers have helped drive the expansion by multiplying their production, causing prices of domestically made turbines to fall rapidly. However, as installed wind capacity additions level off in the short term owing to transmission bottlenecks and slowing power demand, a surplus of turbine manufacturing capacity looms. The result will likely be a round of industry consolidation. As leading Chinese manufacturers seek alternative outlets, turbine exports from China will also increase.

- A "wind turbine bubble" is looming and will lead to industry consolidation and greater turbine exports. While long-term prospects for wind power remain strong, the short-term overcapacity will lead to a sector shakeup. Weaker players will likely be purged as competition escalates and mergers and acquisitions take place. Exported overcapacity could potentially depress global turbine prices.
- The winning strategy for turbine manufacturers combines competitive prices with high quality. The fast increase in wind capacity—both within China and internationally—is prompting power developers and regulators to reconsider the relationship between price and quality. The winning suppliers that emerge from the consolidation process will be those that distinguish themselves in both areas.

 China will become a growing supplier to the international turbine market. Two key factors in China's wind turbine sector mimic other sectors that have made the country a manufacturing powerhouse: an increased sophistication of leading domestic manufacturers and a decline in prices.

#### About IHS CERA

August 22, 2009

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**IHS Cambridge Energy Research Associates**<sup>\*</sup>, **Inc. (IHS CERA**<sup>\*</sup>) is a leading advisor to international energy companies, governments, financial institutions, and technology providers. IHS CERA delivers critical knowledge and independent analysis on energy markets, geopolitics, industry trends, and strategy. Our services help decision makers anticipate the energy future and formulate timely, successful plans in the face of rapid changes and uncertainty. IHS CERA is valued for our independence, fundamental research, foresight, and original thinking. Our unique integrated framework enables us to offer new insights ahead of conventional wisdom, providing a comprehensive "early warning system" that has a direct impact on investment, decision making, and performance.

http://www.cera.com/aspx/cda/public1/about/about.aspx

New U.S. Ambassador to the People's Republic of China Arrives in Beijing

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## **U.S. Government Highlights**



Jon M. Huntsman, Jr., the new U.S. Ambassador to the People's Republic of China and his wife

Jon M. Huntsman, Jr., the new U.S. Ambassador to the People's Republic of China, his wife and family arrived in Beijing on August 21 to begin his assignment.

Ambassador Huntsman released the following arrival statement:

My wife Mary Kaye, my children and I are delighted to be in Beijing to take up our new responsibilities as representatives of America in China. I am deeply appreciative of the confidence that President Obama has placed in us and for his strong support for the work of the U.S. mission – the Embassy and our five consulates – as we endeavor to develop the kind of peaceful,

cooperative and comprehensive bilateral relationship that is so essential to the prosperity and security of our two great countries. As President Obama said when he nominated me to this post, China will play a crucial role in confronting all the major challenges facing Asia and the world in the years ahead. The United States intends to engage China across the board to address these common challenges.

At the top of my priorities will be helping lay the foundation for sustainable growth in the region and the global economy. This will mean more jobs for Americans and Chinese, choice for consumers, opportunities for U.S. business, expanded market access and investment, increased educational and

cultural exchanges and overall better mutual understanding of our two societies. I also look forward to expanding our bilateral cooperation on climate change, energy and the environment; enhancing global security and non-proliferation programs; and improving public health. My long service as Governor of Utah, Deputy U.S. Trade Ambassador, and U.S. Ambassador to Singapore and my background in business and the private sector, I hope, have prepared me for this new role. I look forward to working with all of you on this important work in the years ahead.

#### Ambassador Huntsman's Biography



**Jon Huntsman** Ambassador China

Term of Appointment: 08/11/2009 to present

Jon Huntsman was tapped by President Barack Obama to serve as United States Ambassador to China in May 2009 and his nomination was unanimously confirmed by the United States Senate. Huntsman was sworn in as Ambassador immediately following his resignation as the Governor of Utah on Tuesday, August 11, 2009 at 11:30 a.m. Huntsman was elected twice as Governor of Utah, including in 2008 with a record percent of the vote, including the majority in all 29 counties. As Governor, Huntsman governed with his eye toward maintaining Utah's unparalleled quality of life, continually increasing the state's economic competitiveness and maximizing funding to Utah's public education system.

Huntsman's breadth of experience in Asia has been developed over a lifetime of interest and involvement. He has previously lived in Asia three times and speaks fluent Mandarin Chinese. Huntsman's public service career began as a White House staff assistant to President Ronald Reagan and has since included appointments as Deputy Assistant Secretary of Commerce for Asia, US Ambassador to Singapore and Deputy US Trade Representative. As a US Trade Ambassador, Huntsman negotiated dozens of free trade agreements, trade and investment framework agreements and brokered other bilateral and multi-lateral trade agreements for the United States with China, Taiwan, Singapore, Australia, India, Vietnam, West Africa, South Africa and other Asian and African nations. He played a critical role in launching global trade negotiations in Doha, Qatar in November of 2001, guiding the simultaneous accession of China and Taiwan into the World Trade Organization.

He is a founding director of the Pacific Council on International Policy and has served on various boards such as the Brookings Institute Asia Policy Board, the Center for Strategic and International Studies Pacific Forum, the Asia Society in New York and the National Bureau of Asian Research.

During his tenure as Governor, Utah was repeatedly recognized by many prestigious organizations for its dynamism, business climate and quality of life. Perhaps most importantly, Utah was named by the Pew Center as the Best Managed State in America. Even in times of economic hardship, Huntsman worked collaboratively with stakeholders to minimize impacts to critical human services while maintaining job-stimulating construction projects and keeping the State's Rainy Day Fund intact as a tool for any future fiscal distress.

Recognized nationally for his leadership, Huntsman served as chairman of the Western Governors Association and on the Executive Committee of the National Governors Association.

As a dedicated public servant, Huntsman is committed to serving in this critical post as Ambassador to one of the most important international relationships for the United States of America. He is a graduate of the University of Pennsylvania and has four honorary doctorate degrees.

Source: The Embassy of the United States of America in China

#### US and China to cooperate on clean energy

President Barack Obama and China's President Hu Jintao announced on November 17 a far-reaching

package of measures to strengthen cooperation between the United States and China on clean and renewable energy. The presidents began by establishing a U.S.-China Clean Energy Research Center to facilitate joint research and development of clean energy technologies by scientists from both countries. The center will be supported by \$150 million in public and private funds over the next five years, split evenly between the partners. Initial research priorities will be building energy efficiency, clean vehicles, and carbon capture and storage.



Also, building on the first-ever U.S.-China Electric Vehicle Forum in September 2009, the two leaders unveiled a U.S.-China Electric Vehicles Initiative, which will include developing joint standards, building demonstration projects in more than a dozen cities, creating technical roadmaps, and carrying out public education projects. Both nations said they share an interest in accelerating the deployment of electric vehicles in order to reduce oil dependence, cut greenhouse gas emissions, and promote economic growth. The countries will also leverage private sector resources to develop clean energy projects in China through the U.S.-China Energy Cooperation Program (ECP). Twenty-four companies are founding members of the program. The ECP will include collaborative projects involving renewable energy, smart grids, clean transportation, green buildings, combined heat and power, energy efficiency, and clean coal.

As part of their joint efforts, the two powers will hold an ongoing series of forums. For example, a new U.S.-China Energy Efficiency Forum will be held annually, rotating between the two countries. This will be part of the new U.S.-China Energy Efficiency Action Plan, launched by President Obama and President Hu Jintao. The action plan commits the two countries to work together and with the private sector to improve the energy efficiency of buildings, industrial facilities, and consumer appliances. Similarly, the new U.S.-China Renewable Energy Partnership will feature an annual rotating forum. Under the partnership, the two countries will develop roadmaps for widespread renewable energy deployment in both countries. In addition, the countries will encourage state-to-state and region-to-region partnerships in order to share experiences and best practices. Also included in this undertaking will be a new Advanced Grid Working Group, which will bring together U.S. and Chinese policymakers, regulators, industry leaders, and civil society to develop strategies for grid modernization in both countries. See the DOE press release and the DOE fact sheets on the Clean Energy Research Center (PDF 66 KB), Electric Vehicles Initiative (PDF 91 KB), Energy Efficiency Plan (PDF 72 KB), and Renewable Energy Partnership.

Source: <u>U.S. Department of Energy - Office of Energy Efficiency and Renewable Energy</u> Nov. 18, 2009

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#### U.S.-China Clean Energy Cooperation Signing Ceremony

The U.S. Department of Commerce (DOC), Department of Energy (DOE), and U.S. Trade Development Agency (USTDA) signed a MOU with China's National Energy Administration (NEA) and Ministry of Commerce (MOFCOM) in the Great Hall of the People's in Beijing on November 17, 2009. The MOU aims at promoting clean energy project development work in China through U.S.-China Energy Cooperation Program (ECP).

Commerce Secretary Gary Locke, Energy Secretary Steven Chu, USTDA



Acting Director Leocadia Zak, and Chinese Vice Premier Li Kejiang, Minister of Science and Technology (MOST) Wan Gang, Vice Minister of National Development and Reform Commission Zhang Xiaoqiang, MOFCOM Vice Minister Ms. Ma Xiuhong and NEA Vice Administrator Liu Qi attended the signing ceremony. Also attending the ceremony are representatives from 24 ECP founding members and American Chamber of Commerce in Beijing.

At the ceremony, USTDA also signed a MOU with China Power Engineering Consulting Group



Corporation (CPECGC) to support an Integrated Gas Combined Cycle (IGCC) feasibility study.

Prior to the signing ceremony, Commerce Secretary Locke, Energy Secretary Chu, and U.S. Trade Representative Ambassador Ron Kirk had a brief bilateral meeting with Chinese Vice Premier Li Keqiang. Both sides committed to work together to promote bilateral cooperation in the energy sector, avoid protectionism and agreed that private sector play an important role in addressing worldwide problems such as climate

change.

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#### Background on U.S.-China Energy Cooperation Program (ECP)

The U.S.-China Energy Cooperation Program (ECP), a private-sector initiated, managed and financed organization, was launched in Beijing on September 21, 2009 by founding U.S. member companies. Representatives of U.S. government agencies that participated in the launch included: the U.S. Trade and Development Agency, the U.S. Department of Commerce/Commercial Service, and the U.S.

Department of Energy. Each of these agencies has provided an advisor to ECP and its Management Board.

The purpose of the ECP, a public-private partnership, is to leverage private sector business resources in both the U.S. and China to:

- promote commercially viable project development work in clean energy and energy efficiency, and
- support the sustainable development of the energy sectors in both countries.

This will be accomplished by increasing awareness of U.S. technology, product standards, regulatory processes, and services, while learning about and partnering with those in China with applicable expertise, technology and equipment.

ECP's establishment reaffirms the U.S. commitment to working with China as a partner on important energy and environmental issues. It provides a vehicle for companies to work together to pursue market opportunities, address trade impediments, and advance sustainable development.

As of December 08, 2009, ECP Founding Member Companies include:

1. AECOM (Asia) 2. AES 3. Boeing, Inc. 4. Caterpillar 5. Celanese China 6. CISCO Systems (China) 7. Corning 8. Covanta Energy 9. Cummins **10.Dow Chemical** 11.FirstSolar 12.GE 13.Honeywell 14.IBM 15. Ingersoll Rand 16.Intel 17.LP Amina 18.Oshkosh 19.Peabody 20.Rockwell Automation 21. Tang Energy 22.Timken 23. United Solar Ovonic 24.UTC

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#### > The 9<sup>th</sup> U.S.-China Oil and Gas Industry Forum held in Qingdao

The 9<sup>th</sup> U.S.-China Oil and Gas Industry Forum (OGIF) was held September 27-29, 2009 in Qingdao. The Forum was co-sponsored by U.S. Department of Commerce, Department of Energy, and China's National Energy Administration and supported by the United States Energy Association and Shandong Provincial Government and Qingdao City government. Over 180 U.S. and Chinese government officials and business executives in the oil and gas sectors attended the event.

The OGIF is the only bilateral vehicle available for industry and government to address pressing commercial oil and gas issues. It is a public-private partnership that allows the two sides to candidly consider the challenges and opportunities facing the U.S. and China energy sectors. The OGIF, held annually since 1998 (with the exception of 2008), is co-chaired by the Departments of Commerce and Energy (DOE) and China's National Energy Administration (NEA).



During the day-long OGIF meeting, participants from both the United States and China discussed development trends in the world oil and gas industry, deepwater and offshore oil developments, and the opportunities and challenges in developing unconventional gas. They also discussed ways that U.S. and Chinese industry can join hands in exploring business opportunities in third countries.

U.S. Ambassador Jon Huntsman and NEA Administrator Zhang Guobao attended the conference. The 10<sup>th</sup> OGIF will be held next year in the United States.

Prior to OGIF, U.S. DOE and China's NEA held the 4<sup>th</sup> U.S.-China Energy Policy Dialogue (EPD) in Qingdao. The Department of Energy and China's NDRC established the EPD in May 2004 to facilitate policy-level exchanges of views on energy security, mutual economic issues, and energy technology options. The EPD provides a valuable forum for sharing best practices in energy efficiency, resource conservation, market and regulatory policies, oil and gas, nuclear power generation, and renewable energy technology development and deployment.

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#### U.S. Ambassador Jon Huntsman Met U.S. Oil and Gas Executives in Qingdao

U.S. Ambassador Jon Huntsman met with U.S. oil and gas company executives in Qingdao on September 27<sup>th</sup> morning. The company representatives briefed the Ambassador on their business activities in China. Senior Commercial Officer William Zarit and Commercial Officer Bryan Larson attended the meeting.



During his stay in Qingdao, Ambassador Huntsman also met with Mr. Zhang Guobao, NEA Administrator and Mr. Li Zhaoqian, Vice Governor of Shandong Province.

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#### DOE and Chinese Ministry of Science and Technology Co-Host First Ever Electric Vehicle Forum

The first-ever U.S.-China Electric Vehicle Forum concluded on September 29 in Beijing, China, bringing together more than 140 U.S. and Chinese officials from government, industry, academia and advocacy groups to discuss progress made in the electric vehicle industry to date and opportunities for collaboration and progress moving forward. DOE Assistant Secretary for Policy and International Affairs David Sandalow joined with Minister Wan Gang of the Chinese Ministry of Science and Technology to co-host the event and highlight the rapidly growing electric vehicle industry in both countries.

"The U.S. and China share a strong common interest in putting millions of electric vehicles on the road soon, which will lessen our dependence on foreign oil and help address the global climate challenge," said Sandalow. "Working together, we can accomplish more than acting alone."

The U.S. and China are the two largest auto markets and energy consumers, and together emit more than 40 percent of the world's greenhouse gases. The Electric Vehicle Forum provided a venue for experts to exchange recent developments and identify promising opportunities for technical and policy collaboration.

The Electric Vehicle Forum builds upon growing U.S.-China collaboration on clean energy technologies. In July, the United States and China announced plans to develop a U.S.-China Clean Energy Research Center (CERC) that will facilitate joint research and development on clean energy by bringing together teams of scientists and engineers and providing an information clearing house to help researchers in both countries. CERC has identified clean vehicles as a priority for joint projects and it's expected that the Research Center will help advance cooperative projects identified during the Electric Vehicle Forum.

Collaboration on science and technology has long been a cornerstone of U.S-China bilateral cooperation. This year marks the 30th anniversary of the U.S.-China Science & Technology Agreement, which represented the first agreement between the two countries following the normalization of relations in the 1970s. Today, opportunities abound for U.S.-China cooperation on clean energy technologies.

Jody Freeman, Counselor for Energy and Climate Change at the White House and luncheon speaker at the Electric Vehicles Forum, said, "By working together the U.S. and China can leverage technological breakthroughs, increase consumer acceptance and grow market penetration of clean vehicles."

Source: U.S. Department of Energy Media contact(s): (202) 586-4940

#### U.S. – Shandong Industrial Energy Efficiency Workshop

The U.S.-Shandong Industrial Energy Efficiency Workshop was held on November 24 in Jinan, capital city of China's Shandong Province. The

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workshop, jointly organized by the U.S. Commercial Service in Beijing and the Energy Conservation Office of Shandong Provincial Government, attracted over 120 Chinese company executives from 16 major cities in Shandong Province and senior officials from the energy conservation offices of 14 cities in Shandong Province. They represented industry sectors such as power generation, steel, chemical, electric, biochemical, oil and gas, cement, coking, metallurgical and machinery.

Minister-counselor for Commercial Affairs of the U.S. Embassy in Beijing, Mr. William Zarit, and Mr. Zhang Jigang, Deputy Director-general of Shandong Provincial Foreign Affairs Office, represented the U.S. and Chinese sides respectively to open the workshop.



Five U.S. companies, GE, Honeywell, Rockwell, Ingersoll Rand/Trane, and Emerson presented the Chinese audience their energy efficiency solutions.

Commercial Officer Bryan Larson and Commercial Specialist Sherry Cai worked closely with Shandong Provincial government officials and arranged one-on-one meetings between participating U.S. firms and

Chinese companies after the workshop.

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#### CS Beijing Organizes U.S. Pavilion at China Coal and Mining Expo

The Commercial Service in Beijing in collaboration with Marketing International Corporation (MIC) and the West Virginia Development Office (WVDO) organized 35 U.S. coal and mining technology developers

and service companies to exhibit at the 13<sup>th</sup> China International Technology Exchange & Equipment Exhibition on Coal & Mining (China Coal & Mining Expo 2009) held October 27-30, 2009 at the National Agricultural Exhibition Center in Beijing.

China Coal & Mining Expo, a biennial expo hosted by the China National Coal Association, is the leading and most influential event in China's



coal industry. This year's show, certified by the U.S. Department of Commerce, is the largest in its history and attracted 345 companies from 19 countries to display their latest coal mining technologies and equipment.



On October 28, Senior Commercial Specialist Michael Wang and Commercial Specialist Sherry Cai of CS Beijing attended the welcome reception hosted by West Virginia Development Office (WVDO), which organized 12 West Virginia companies to exhibit at the show. SCS Wang welcomed WV exhibitors on behalf of the CS China and briefed them on the U.S.-China energy relationship.

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Over 70 people joined the reception, including representatives from Chinese coal and mining regulators, associations and industry.

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## Market News and Analysis

#### NEA Personnel Change

There have been major personnel changes taking place at China's energy regulator, the National Energy Administration.

In August, Mr. Wu Yin, NEA's Chief Engineer, was promoted to be Vice Administrator of NEA while Mr. Wu Guihui, Director-General of the International Cooperation Department replaced Mr. Wu Yin to be the Chief Engineer. Mr. Sun Qin, NEA's Vice Administrator, was appointed to be President and Party Secretary of China National Nuclear Corporation (CNNC) to replace Kang Rixin, who was recently arrested for bribery. Mr. Sun is also the Director of China's National Atomic Energy Agency.

Both Mr. Wu Yin and Mr. Wu Guihui was Deputy Director-General of the Energy Bureau of the National Development and Reform Commission (NDRC) before the establishment of the NEA.

#### <u>NEA Leadership Lineup</u> Zhang Guobao, Administrator Liu Qi, Vice Administrator Wu Yin, Vice Administrator Wu Guihui, Chief Engineer

#### About Mr. Wu Yin, NEA Vice Administrator



Mr. Wu Yin came under the spotlight after his recent appointment to be one of the Vice Administrators of the NEA. Limited information about him can be found. Well-informed sources said that Mr. Wu has been working in China's coal industry sector for most of his career serving in the Chinese government. He worked in the former Ministry of Coal until its closure in 1998. Mr. Wu then became the Deputy Director-General of the Energy Bureau at the National Development and Reform Commission (NDRC) overseeing the coal

industry. He was appointed Chief Engineer of the National Energy Administration when it was formed in March 2008.

Coal represents about 70% of China's energy consumption. Mr. Wu will play a key role in shaping the future developments of this industry nowadays as clean energy and energy efficiency have become important agendas for the governments of the world's key economies. Mr. Wu has stressed in most of his recent speeches the development of a stable, cleaner and cost-effective energy system.

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#### > Chinese Solar PV Companies Aim at Both International and Domestic Market

Although President Obama wants to make the United States "the world's leading exporter of renewable energy," China has sped up its efforts to become the dominant player in green energy — especially in solar power.

Chinese companies have already pushed down the price of solar panels by almost half over the last year. Backed by lavish government support, the Chinese are preparing to build plants to assemble their products in the United States to bypass protectionist legislation. China's biggest solar panel manufacturer, Suntech is selling solar panels on the American market for less than the cost of the materials, assembly and shipping for building the market shares. Yingli Solar, another large Chinese solar panels manufacturer, also had a "preliminary plan" to assemble panels in the United States.

Besides the American market, Europe is still the main target for Chinese Solar companies. Anticipating the recovery of European and American markets and several bullish policies for the Chinese solar industry, some Chinese big PV companies like Yingli and CSI announced their ambitious plans. CSI, for example, will increase its solar module capacity to 800 megawatts from its previous 620 megawatts. The expansion will be complete in August. After each expansion, the productivity of China's main manufacturers of PV cells will reach 4,770 megawatts.

Company expansion springs from the increasing of orders. Take June as an example. Trina Solar provided a 15 megawatt PV module to Enfinity. CEEG signed a contract with Italian Renergies Company to provide 53 megawatt cells in the next 6 years. Yingli also signed a contract with Recurrent Energy, and will provide 20 megawatt cells in the next 3 years.

While expanding the productivity, Chinese PV manufacturers still rely on a low price strategy. The price of polysilicon has dropped from \$200-\$300 per kilogram to \$60 per kilogram. That means at the same product quality level, foreign companies are unable to compete with Chinese companies in terms of price. That is why Chinese companies have more and more market share in American and European markets.

In the domestic market, Chinese companies are waiting for domestic demand to grow. Although the Chinese government enhanced its support of the solar industry by offering solar companies ever more generous subsidies, including free land, cash for research and development and loans at considerably lower interest rates, a significant increase in the demand for solar energy in the Chinese domestic market will still take 2-3 years. The 10 megawatt solar power plant in Dunhang, Gansu Province, and another 10 megawatt solar power plant in Delingha, Qinghai Province are a good sign, however, of a boom in China domestic market demand.

Contact: Sherry Cai/CS Beijing at email: <u>hongying.cai@mail.doc.gov</u>

#### Installed wind power capacity doubles in H1 (August 3, 2009)

China's installed wind power capacity that transmits power into the national electricity grid rose 11.81 million kilowatts in the first half of this year, doubling the figure of a year earlier, an industry expert told Xinhua over the weekend.

Shu Yinbiao, vice general manager of the State Grid Corporation, said the installed wind power capacity soared 101 percent year on year by the end of June, showing the country's strengthened efforts on using renewable energy.

English link: http://www.china.org.cn/environment/news/2009-08/03/content\_18251725.htm

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## Project Alerts

#### Nuclear Power Plant in Jiangsu

Jiangsu Nuclear Power Company will invest RMB 26 billion Yuan on the third phase of the Tianwan Nuclear Power Station. Two 1 million kw reactors will be built in Tianwan of Lianyugang city. The estimated construction period will be from 2010 to 2015. The fund for the project is in place now. Nevertheless, the project is still pending approval by the National Development and Reform Commission (NDRC).

#### Wind Power Farm in Jixi of Heilongjiang

The China Huadian New Energy Development Company plans to invest RMB 552 million Yuan to build a wind farm in Jixi city of Heilongjiang Province with a total capacity of 49,500kw. There will be a need for 33 wind power generators with 1,500 kw each. The construction period will be from 2009 to 2010. The project is pending approval from the Heilongjiang Provincial Development and Reform Commission.

#### Sinopec to Build LNG Pipeline in Qingdao, Rizhao and Linyi cities

Sinopec's Natural Gas Company plans to invest RMB 9.76 billion Yuan to build a LNG pipeline going through Qingdao, Rizhao and Linyi. The total length of the pipeline will be 347 kilometers. The estimated construction period will be from 2009 to 2012. The project will need approval by the National Development and Reform Commission (NDRC). At present, the project owner is going through the environmental assessment.

#### Coal-fired Power Plant Expansion in Shaanxi

China Datang Group plans to invest RMB 1.1 billion Yuan to expand the No. 7 generating unit of its thermal power plant in Hanzhong city of Shaanxi Province by adding a coal powered generator of 330,000 kw to the existing generating unit. Datang plans to complete the construction by 2010. At present, the project is pending approval by the National Development and Reform Commission (NDRC).

#### Waste-to-Power Project in Jiangsu

Jiangsu Tian Ying Sai Te Environmental Company plans to invest RMB 240 million Yuan to build a garbage-burning power station in Rudong county of Nantong City. The construction period will be from 2009 to 2010. Once completed, the project will be able to process five million tons of garbage daily to support the operation of a 7.5 mw power generator. The project is in the designing stage.

Contact: Michael Wang/FCS Beijing at email: jianhong.wang@mail.doc.gov

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## **Upcoming Events**

#### Solarcon China

Dates: March 16 -18, 2010 Location: Shanghai New International Expo Center, Shanghai Website: <u>http://www.semi.org.cn/solarconchina/en/Exhibitors.asp</u>

China International Petroleum & Petrochemical Technology and Equipment Exhibition (CIPPE/CIOOE 2010)

Dates: March 22-24, 2010

Location: New Beijing International Exhibition Center, Beijing

Website: <u>www.cippe.com.cn</u>

The Commercial Service of the U.S. Embassy in Beijing is pleased to invite U.S. firms to showcase their equipment and services in our "U.S. Pavilion" at **CIPPE/CIOOE 2010**. CIPPE, with nine years of track record, is the most influential and well established event of its kind in Asia, showcasing an array of companies interested in China's oil & gas and petrochemical industries. CIPPE offers U.S. firms an excellent opportunity to export to China.

CIPPE/CIOOE 2009 attracted 800 international and domestic companies. The U.S. pavilion organized by the U.S. Commercial Service occupied a floor space of 600 square meters in prime location of the new China International Exhibition Center.

CIPPE 2010 will take place in Beijing March 22-24, 2010 at the new China International Exhibition Center. We look forward to working with you to promote your products and services in China.

To join the U.S. Pavilion at CIPPE 2010, please contact Michael Jianhong Wang of CS Beijing at email: jianhong.wang@mail.doc.gov

#### SNEC (2010) PV POWER EXPO

Dates: May 5-7, 2010 Location: Shanghai New International Expo Center, Shanghai Website: <u>http://www.snec.org.cn/indexe.asp</u>

#### > EP China 2010/Electrical China 2010

Dates: October 19-21, 2010 Location: China International Exhibition Centre in Beijing

The U.S. Commercial Service in Beijing is pleased to invite American firms to participate in the U.S. Pavilion at the EP China 2010/Electrical China 2010 to promote American products, equipment, technologies and power generation, transmission, distribution services to China's emerging electric power market!

EP China 2010/ Electrical China 2010, organized and supported by the China Electricity Council and State Grid Corp. of China, will take place from October 19-21, 2010 at the China International Exhibition Centre in Beijing, PR China. It is the only power exhibition that enjoys support from the major power corporations and grid companies in China. EP China/Electrical China 2010 is an excellent vehicle for U.S. firms interested in exporting to China.

EP Shanghai 2009 in Shanghai drew more than 360 exhibitors from 20 countries / regions and 17,248 visitors. EP China has become the largest and the most reputable electric power trade fair in China.

We are eager to work with you to promote your American products and services in China. We look forward to hearing from you before the end of October, 2010.

To join the U.S. Pavilion, please contact Ms. Grace Cao of CS Beijing: *Ms. Grace – Yue Cao Sr. Commercial Specialist, U.S. Embassy Beijing, China* Email: <u>yue.cao@mail.doc.gov</u> Tel : (86-10) 8531 4796

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### 🚽 Get to Know CS China

#### Introduction to the U.S. Commercial Service Energy Team in China

The U.S. Commercial Service in China offers valuable assistance to U.S. businesses exporting goods and services. Our country-wide Energy Team can help you identify trade opportunities and local trading partners. From <u>our four consulates</u><sup>1</sup> in Shanghai, Guangzhou, Chengdu and Shenyang and <u>14 2<sup>nd</sup> tier</u> <u>cities markets</u><sup>2</sup>, we can help you access all of China!

Members of CS China Energy Team

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Mingming Ma Hongying Cai	<u>Stellar Chu</u>		

#### Featured CS China Services

# Platinum Key Service (PKS)

#### Need long-term guidance?

The Platinum Key Service provides long-term, sustained support from CS China for your firm's activities in the China market. Whether you need help in developing and implementing a market entry strategy, are involved in a major project, or require U.S. government advocacy on a protracted trade dispute, the Platinum Key Service will ensure that you receive the long-term, focused support you need to achieve success.

#### A Market Development Service

As a Platinum Key Service client you will receive ongoing priority support for your marketing efforts in China. This market development support will be specifically tailored to your unique needs. You will have a dedicated account executive who will help design and implement a strategy, provide you with a single point of contact, and oversee the delivery of all our services to you. Finally, each month you will receive a monthly progress report from your account executive.

Platinum Key clients may select among the following types of services:

**Consultations:** In-depth advice tailored on specific products or services to meet client goals/objectives.

Early Alerts: Timely information on emerging business opportunities and major projects.

**Dispatches:** Focused bimonthly intelligence, analysis, and commentary on emerging opportunities, market trends, key players, government projects and policies specific to the client's needs. We will even provide abstracts on relevant articles from major newspapers.

**Priority Dialogue:** All PKS client's inquiries have top priority and will be answered within 24 hours.

**Special Events:** Early notice on U.S. Commercial Service sponsored events, e.g. roundtables, briefings, trade events, and meetings with industry/government players.

U.S. Meetings: CS staff will be available for consultations during travel to the United States.

Access to CS Services: Priority access to U.S. Embassy and U.S. Consulate market information and services.

Phone -and Video- Conferences: Customized Phone -and Video- conferences.

States

**Cost**: depends on the scope of work.

To request this service, please contact your nearest U.S. Commercial Service Export Assistance Center<sup>1</sup>, call 1-800-USA-TRADE, or email us at <u>chinacustomer.service@mail.doc.gov</u><sup>2</sup>.

Links

- 1. http://www.buyusa.gov/home/us.html
- 2. mailto:chinacustomer.service@mail.doc.gov

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