FACT SHEET: U.S.-China Commercial Relations

China is a key market for U.S. exports. Those exports are generating jobs in every corner of the United States and across every major sector. These involve some of our country's largest companies, but also an increasing number of small and medium-sized enterprises.

In preparation for this visit, several large purchases have been approved including for 200 Boeing airplanes valued at $19 billion. In addition, the Chinese government has indicated that its companies signed 70 contracts for $25 billion in U.S. exports from 12 states. These included sectors ranging from auto parts to agriculture, machinery to chemicals. In addition, 11 investment contracts were signed worth $3.24 billion. Additional transactions were announced or showcased, exceeding $12 billion in total value with approximately $986.8 million in U.S. export content. These deals worth over $45 billion in increased exports will help support an estimated 235,000 jobs in the United States. These cross-border collaborations, both public and private, underpin the expanding U.S.-China commercial partnership, contributing to economic growth and development in both countries. A number of these transactions highlight the increased collaboration in such areas as clean energy and green technologies. Examples of some of the deals associated with this visit include:

- **Boeing Airplane Sales:** China's agreement to approve airline contracts for 200 orders covers aircraft to be delivered over a three-year period, 2011-2013. The approval, the final step in a $19B package of aircraft, will help Boeing maintain and expand its market share in the world's fastest growing commercial aircraft market. Including 737s and 777s, the agreement help supports more than 100,000 American jobs, including those in Boeing and its suppliers throughout the U.S.

- **General Electric --China Ministry of Railways (MOR) Letter of Intent on High Speed Rail Technology Transfer and Purchasing Rolling Stock and Signaling Equipment:** The Chinese Ministry of Rail (MOR) and General Electric (GE) have signed a letter of intent expanding upon an existing strategic partnership to bring Chinese high-speed rail technology to the United States. GE and China South Locomotive & Rolling Stock Corporation Limited (CSR) plan to form a joint venture in the United States to manufacture high- and medium-speed electric multiple unit trains. GE estimates that new business generated by the HSR JV could support up to 3,500 jobs in the United States. GE also will agree to manufacture locomotives for China and will provide components for 500 or more locomotives. The LOI will support efforts to capture new business opportunities valued at up to $1.4 billion with an estimated $360 million in U.S. export content, supporting up to 200 GE Transportation jobs.

- **Navistar Inc -- JAC Truck and Engine Joint Ventures:** Navistar expects central Chinese government approval shortly for a $400 million, 50-50 joint venture with the state-owned Anhui Jianghuai Automobile Company (JAC). Navistar will export services and parts to be used in the manufacture of diesel engines and commercial trucks. The JV will develop, manufacture, market, and sell heavy duty trucks and light to medium/heavy duty engines, primarily in China. The joint venture will be based in Hefei City, Anhui Province. Once production begins, Navistar anticipates that many components will be sourced from the United States. Direct U.S. exports during the first year of the joint venture are estimated at $15 million, but are forecast to grow significantly over the next five years as production increases. Navistar estimates the net employment benefit of the joint ventures to
the United States economy at 200 jobs in the United States, mainly in the field of engineering and other services.

- **General Electric-Shenhua Gasification Joint Venture**: GE and China Shenhua Energy Company Limited (Beijing, China) have formed a joint venture company in order to combine GE’s expertise in gasification and cleaner power generation technologies with Shenhua’s expertise in building and operating gasification and power generation facilities. The joint venture will seek to advance cleaner coal technology solutions for industrial chemicals, fuels, and power generation. GE estimates approximately $150 million in U.S. exports over the first five years of the joint venture, mainly related to technology licensing, engineering, and R&D support. Additionally, the joint venture has potential to generate $1.5 to 2.5 billion in U.S. exports over the long term.

- **General Electric-Huadian Joint Collaboration Agreement on Decentralized Energy Combined Heat and Power Projects**: General Electric is signing a Joint Collaboration Agreement with China Huaneng Engineering Co., Ltd for cooperation on Decentralized Energy Combined Heat and Power (DECHP). This agreement will be a binding agreement to develop, market, and sell DECHP generators, an efficient alternative to coal-fired power plants. GE estimates that at least 50 DECHP gas turbine generator sets will be sold in China in the next ten years, resulting in $500 million in sales and $350 million in U.S. export content, supporting over 200 jobs in the United States.

- **General Electric-AVIC Avionics Joint Venture Agreement**: GE and AVIC will sign an agreement to form a new joint venture company to market globally advanced avionics systems for future commercial aircraft. The GE-AVIC joint venture is expected to support 300 high-tech jobs in Michigan and Florida.

- **UPC Management Wind Power Agreements**: UPC Management, LLC (UPC) is a Miami, Florida based wind power developer, having interests in 24 sites in 12 Chinese provinces. The company has negotiated a Strategic Framework Agreement (SFA) with the China Guo Dian Corporation (CGD), which develops, builds, operates, and distributes electricity and heat. Under the SFA, CGD and UPC will form ventures leading to the establishment of wind power generation joint ventures. The total value of the SFA investments could reach $1.5 billion, of which UPC will invest up to $735 million.

- **Honeywell—Haier Group Memorandum of Understanding for Global Strategic Cooperation**: Honeywell International Inc., headquartered in Morris Township, New Jersey (Honeywell), entered into an agreement with Haier Group (Haier) to collaborate on the development and promotion of low-emission, high energy-efficiency products and solutions. Honeywell estimates the total value of the five-year MOU at $53 million per annum, or $265 million and U.S. export content at $42 million per annum, or $210 million.

- **LP Amina MOU with Beijing Energy**: LP Amina, environmental engineering company headquartered in Novi, Michigan, signed a Memorandum of Understanding (MOU) with Beijing Energy to sell de-nitrification engineering, equipment and other potential environmental and boiler efficiency improvement solutions. This MOU creates a framework for potential long-term cooperation to reduce emissions and improve efficiency across Beijing Energy's power plant facilities in China.

- **LanzaTech—Bao Steel Joint Venture to Build an Ethanol Plant**: LanzaTech Inc., a wholly-owned subsidiary of LanzaTech New Zealand, headquartered in Roselle, Illinois (LanzaTech), and Bao Steel Group Corporation (Bao Steel), will conclude a Contractual Joint Venture Contract for the construction and operation of a demonstration ethanol production facility in China. The facility will utilize waste flue gas from Bao Steel’s Shanghai steel mill as feed stock and LanzaTech proprietary gas fermentation technology to produce ethanol.

- **MVP RV -- Winston Battery Limited Recreational Vehicle MOU**: MVP RV (MVP; Riverside, California) is a privately-held U.S. company that produces self-powered and trailer Recreational Vehicles. The company has an existing distributor relationship with privately-held Winston Battery
Limited (Winston; Shenzhen, China). Winston, through the proposed MOU, plans a major capital injection into MVP RV in the amount of $310 million to promote motor home exports to China. Additionally, Winston Battery Limited will provide capital for the development of all-electric recreation vehicles and charging systems. The goal is to export over 10,000 Class A (self-powered, bus-sized) motor homes and 20,000 Class C (self-powered, van-sized) motor homes to China in the next 3-4 years. MPV estimates the value of these exports to be over $5 billion. The MOU specifies the intention to export vehicles to China through Winston and the eventual incorporation of an all-electric powertrain to future vehicles.

- **Caterpillar Inc.** – Caterpillar China Investment Co. Ltd. Business Agreement: Caterpillar (Peoria, Illinois) and Caterpillar China Investment Co. Ltd. – a wholly owned subsidiary of Caterpillar – will sign an agreement under which $1.4 billion in U.S.-manufactured mining and construction equipment, and diesel and gas turbine engines will be shipped to China. The intra-company sale will support approximately 7,567 jobs in the United States.

- **LP Amina MOU with Yixing Union Congregation Co. Ltd:** LP Amina, a multinational environmental engineering company headquartered in Novi, Michigan, signed a Memorandum of Understanding (MOU) with Yi Xing Union Congregation Co., Ltd, a Chinese energy and chemical company. The MOU will formalize plans in advance of an expected contract signing, which will establish a collaborative pilot project to demonstrate LP Amina’s patent-pending Coal to Chemicals System. This innovative technology will couple chemical production with power generation and enable the use of thermal energy generated from the chemical production for additional efficiency power generation. This process would also reduce emissions by nearly 90% compared to the conventional production process in use today. Once commercialized, LP Amina estimates that this technology could be deployed in the United States creating up to 500 jobs.

- **Optimax Systems, Inc -- Shanghai Micro-Electronics Equipment Co., Ltd. Precision Optics Sale:** Optimax Systems, Inc. (Ontario, New York), a manufacturer of high-precision optical components, has signed a new agreement for supplying precision optics to Shanghai-based Shanghai Micro-Electronics Equipment Co., Ltd. (SMEE) for incorporation into SMEE’s advanced lithography equipment. SMEE is rapidly expanding its presence in the semi-conductor, MEMS and flat panel display manufacturing industries in China and throughout Asia. By combining their innovative technologies, SMEE and Optimax can further expand potential for next-generation lithography in the Chinese market. Optimax plans a $4 million expansion of its ultra-precision manufacturing capacity to support this new agreement with SMEE, which will include adding 50 new manufacturing jobs for high-precision optical technicians at its Ontario, New York facilities. This follows on a $2 million facility expansion already completed to support business done with SMEE to date.

- **Erickson Air-Crane Heavy Lift Helicopter Sale:** Erickson Air-Crane (Portland, Oregon) announces the pending sale of five S-64 (commercial) helicopter aircraft to China Taicang Aircrane Company Ltd. The transaction has nearly 100% U.S. export content. While the detailed commercial terms of this agreement are presently under negotiation, the companies have recently executed an Acceptance of Proposal that provides for the five aircraft to be delivered over a two year period beginning with the delivery of the first aircraft by February 28, 2011.

- **Celanese -- Wison Group Memorandum of Understanding for Ethanol Production:** Celanese Far East Co., a subsidiary of Celanese Corporation headquartered in Dallas, Texas (Celanese), and Wison Group Holding Limited (Wison), will conclude a Memorandum of Understanding for the construction and operation of an industrial ethanol production facility in China. Wison plans to invest in a coal gasification unit based on clean coal technology to produce synthesis gas per Celanese specs, and Celanese plans to invest approximately $650 million in an Ethanol Complex using the output from Wison as feed stock, and Celanese proprietary technology, to produce ethanol for industrial use, and potentially for fuel ethanol. This transaction is valued at approximately $815 million, with $50-80 million in U.S. export content. Celanese estimates project implementation will support an estimated 200-250 U.S. jobs.
• **Westinghouse Electric Company -- China Baotou Nuclear Fuel (CBNF) Fuel Fabrication Agreement**: Westinghouse Electric Company concluded a contract to design, manufacture and install fuel fabrication equipment for use by CBNF to manufacture fuel for the Westinghouse AP-1000 nuclear power plants currently under construction at sites across China.

• **Westinghouse Electric Company -- China State Nuclear Power Technology Corporation (SNPTC) Nuclear Cooperation Agreement**: Westinghouse and SNPTC announced a two-year extension of a nuclear cooperation agreement that focuses on continued deployment of the Westinghouse AP-1000 nuclear power plant in China as well as service and maintenance, technology development and strategic investment. The agreement extends the commitment of both Westinghouse and SNPTC to explore future cooperation in areas of strategic interest including large passive plant development; follow-on AP-1000 cooperation; services and research and development.

• **AES-- Chongqing Energy Investment Group Memorandum of Comprehensive Cooperation**: AES China, a subsidiary of AES Corporation headquartered in Arlington, Virginia, entered into an agreement with Chongqing Energy Investment Group Ltd (Chongqing) to jointly develop, construct and operate a series of renewable energy projects, including hydroelectric, wind, ventilation air methane, clean coal and low carbon technology projects. This transaction is valued at approximately $300 million.

• **Alcoa and the China Power Investment Corporation MOU**: Alcoa (New York, New York) and the China Power Investment Corporation (CPI) announced a Memorandum of Understanding to collaborate on a broad range of aluminum and energy projects representing an estimated $7.5 billion in investment. The two companies will intensify their collaboration in China on developing clean energy projects and outside China on a broad range of initiatives. The total employment impact to the U.S. economy of this transaction is not known at this time; however, Alcoa estimates that this undertaking will improve the global competitiveness of the company and support jobs in the United States.

• **Ener1 – Wanxiang Battery Joint Venture**: Ener1, Inc. (New York, New York), a manufacturer of Lithium Ion battery systems for electric vehicles and Wanxiang Group, a leading Chinese auto components manufacturer, seek to enter into an MOU to jointly produce advanced battery systems for electric cars and power utilities in Asian markets. This MOU builds upon a binding May 2010 letter of intent and seeks to establish a China-based joint venture to produce lithium-ion cells, modules and battery packs for use in electric vehicles and power grid energy storage applications for the Chinese market and also export to the markets of Taiwan, Hong Kong and Japan. Ener1 executives credit U.S. DOE match-making and financial assistance with the company’s success in gaining access to the Chinese market. The company expects that participation in this joint venture would be part of a larger strategy to develop manufacturing and design capacity in the United States, supporting up to 1,500 jobs in Indiana.

• **Emberclear and CERI Licensing Agreement**: EmberClear (Calgary, Alberta Canada), with offices in Houston, TX, signed an exclusive license with Clean Energy Research Institute (CERI), a clean energy technology subsidiary of Huaneng Power Group of China, to become a global licensing and development partner. EmberClear will provide engineering and project development services for economic and efficient clean fossil energy solutions and scientific consulting services in international projects. EmberClear and CERI highlighted the first project of this partnership, a 270 Megawatt IGCC power plant in Pennsylvania that recently received all relevant permits.

• **Peabody Energy and Yankuang Xinjiang Nenghua Company Limited MOU**: Peabody Energy, headquartered in St. Louis, Missouri and Yankuang Xinjiang Nenghua Company Limited, a wholly owned subsidiary of Yankuang Group Company Limited, signed a Memorandum of Understanding to jointly develop an integrated clean energy center in China’s Xinjiang Autonomous Region. The center
will include construction of an ultra supercritical clean coal electricity generation project and coal-to-
natural gas conversion facility fueled by a new open-cut coal mine.

- **AEP – China Huaneng**: American Electric Power Company, headquartered in Columbus, Ohio, signed cooperation agreements with three Chinese entities, China Huaneng, State Grid Corporation of China and China National Offshore Oil Corporation. The cooperation agreement with China Huaneng, China’s largest power company, relates to evaluating a Carbon Capture and Storage (CCS) technology developed by China Huaneng and improving the efficiency of coal-fired power plants. The overall goal is to advance commercialization of CCS in both the U.S. and China.

- **AEP – State Grid Corporation of China**: American Electric Power Company, headquartered in Columbus, Ohio, signed cooperation agreements with three Chinese entities, China Huaneng, State Grid Corporation of China and China National Offshore Oil Corporation. The cooperation agreement with China National Offshore Oil Corporation (CNOOC), the largest offshore oil exploration and production company in China, contains CNOOC investment in the AEP's Mountaineer Plant commercial-scale carbon capture and underground storage project, and plans to explore opportunities for the utilization of captured carbon dioxide for enhanced oil and natural gas recovery in the United States. This is expected to benefit the development of CCS technology in the United States and China.

- **Duke Energy Corporation--ENN Group Co. Ltd. Eco-City MOU**: ENN Group Co. Ltd. and Duke Energy Corporation have concluded a memorandum of understanding (MOU) outlining the terms and scope of cooperation in the development and utilization of clean energy solutions for the Eco-City, a demonstration project intended to showcase clean coal, electric vehicles and energy efficient building technologies in Langfang, China.

- **EPIC Clean Technologies--Tengzhou Huawen Paper Co. Paper Joint Venture Agreement**: EPIC Clean Technologies Corporation, headquartered in Houston, Texas, and Tengzhou Huawen Paper Co. (THP), will conclude a Contractual Joint Venture Agreement for the redevelopment of the THP paper mill. The newly formed Joint Venture will assume ownership of the existing power plant and install a new clean coal gasification power plant to increase power and steam production, lower CO2 emissions by 35 percent, eliminate most other pollutants, and reduce coal consumption. The project includes a license agreement for use of EPIC gasification technology.