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NYT: China builds high wall to guard energy industry



When the United States' top energy and commerce officials arrive in China on Tuesday, they will land in the middle of a building storm over China's protectionist tactics to become the world's leader in renewable energy.

Calling renewable energy a strategic industry, China is trying hard to make sure that its companies dominate globally. Just as Japan and South Korea made it hard for Detroit automakers to compete in those countries — giving their own automakers time to amass economies of scale in sheltered domestic markets — China is shielding its clean energy sector while it grows to a point where it can take on the world.

Steven Chu, the American energy secretary, and Gary Locke, the commerce secretary, are coming here to discuss clean energy and global warming with Chinese leaders, and to see if progress can be made toward getting China to agree to specific targets for reductions in greenhouse gases. Agreement proved elusive during the Group of 8 summit meeting last week in Italy.

But Mr. Chu and Mr. Locke arrive as Western companies, especially Europeans, are complaining increasingly about Beijing's green protectionism.

China has built the world's largest solar panel manufacturing industry by exporting over 95 percent of its output to the United States and Europe. But when China authorized its first solar power plant this spring, it required that at least 80 percent of the equipment be made in China.

When the Chinese government took bids this spring for 25 large contracts to supply wind turbines, every contract was won by one of seven domestic companies. All six multinationals that submitted bids were disqualified on various technical grounds, like not providing sufficiently detailed data.

This spring, the Chinese government banned virtually any installation of wind turbines with a capacity of less than 1,000 kilowatts — excluding 850-kilowatt designs, a popular size for European manufacturers.

Lu Hong, the program officer for renewable energy in the Beijing office of the [Energy Foundation](#), a nonprofit group seeking to support sustainable energy, said that China was willing to invest heavily in renewable energy industries, even though wind and solar energy costs are higher than for coal, precisely because it helps the Chinese economy.

"The Chinese government won't consider such a big solar industry without considering the building up of the domestic industry," she said, adding that China's policies will also help address global warming.

Zhou Heliang, the president of the China Electrotechnical Society, a government entity that plays a broad role in national and provincial technology policy, predicted at the Wind Power Asia conference here on Friday that Chinese-owned companies would increase their share of the Chinese market by an additional 10 or 20 percentage points this year.

That would give them almost three-quarters of the domestic market, compared with a quarter for European and American companies — the reverse of the ratio four years ago.

This year, China passed the United States as the world's largest market for wind energy. It is now building six wind farms with a capacity of 10,000 to 20,000 megawatts apiece, using extensive low-interest loans from state-owned banks.

By comparison, T. Boone Pickens delayed his plans to build a 4,000-megawatt wind farm in Texas, once promoted as the world's largest.

Some foreign companies, particularly European businesses, are starting to express misgivings about China's promotion of the local manufacturers.

European wind turbine makers have stopped even bidding for some Chinese contracts after concluding that their bids would not be seriously considered, said Jörg Wuttke, the president of the [European Union Chamber of Commerce in China](#).

European turbine manufacturers are especially disappointed because they built factories in China in order to comply with the country's requirement that turbines contain 70 percent local content, Mr. Wuttke said. Yet all the multinational manufacturers were disqualified on technical grounds within three

days of bidding for wind farm contracts this spring, even as Chinese companies that had never built a turbine were approved, he said.

European solar power companies are also unhappy. "This is not a level playing field," said Boris Klebensberger, the chief operating officer of [SolarWorld AG](#), which is based in Bonn.

Mr. Wuttke said he was encouraged that Premier Wen Jiabao of China told Chancellor Angela Merkel of Germany in a telephone call on June 25 that China would not discriminate against foreign enterprises, according to the official Xinhua news agency.

But no new Chinese renewable energy regulations have been issued since then on local content requirements or other rules.

American companies play a smaller role in the global renewable energy industry, but some of them are also growing exasperated with the Chinese market. "That has been a tough market for non-Chinese manufacturers," said Victor Abate, [General Electric's](#) vice president for wind energy.

Kevin Griffis, a Commerce Department spokesman, said that the agency had not heard from American companies about difficulties in the Chinese market for renewable energy.

"Generally speaking," Mr. Griffis said, "we support a business environment that is open, transparent, and fair so that all companies are able to compete based on product performance, not country of origin."

World Trade Organization rules ban countries from using local content requirements to force companies like the wind turbine manufacturers to set up factories in a country instead of exporting to it. But much of China's power industry, although publicly traded, is majority owned by the government.

While China promised to sign the W.T.O. side agreement on government procurement "as soon as possible" when it joined the free trade group in 2001 and won low-tariff access to foreign markets, it has never actually signed the side agreement. So its huge state sector remains largely exempt from international trade rules.

Other rules are also making it hard for foreign manufacturers and investors to compete in China.

China's renewable energy standard requires that renewable energy account for at least 3 percent of the generating capacity of each large power company, excluding hydroelectric power, by the end of next year. But the rules do not dictate how much electricity must actually be generated from that capacity.

So power companies have an incentive to buy the cheapest wind turbines available, so as to increase their renewable energy capacity — even if the turbines break down frequently and do not produce that much electricity.

Turbines from Chinese-owned companies tend to have slightly lower purchase prices than foreign-brand turbines, but have higher repair costs, so the life cycle costs are similar, according to Chinese experts. United Nations data from the trading of carbon credits shows that the Chinese-brand turbines produce less electricity because they are more frequently out of action.

Financial regulations for wind farms also make it harder for foreign-owned farms than domestic-owned farms to borrow money or to sell carbon credits. Even well-connected international funds like [Nature Elements Capital](#) have to look hard for projects, while less-connected funds have struggled to find any at all.

Mr. Zhou said that China was also working hard to develop its own capability to manufacture high-tech materials that can withstand the torque, humidity and other stresses that affect wind turbines.

Two American companies are leading suppliers of materials: [PPG Industries](#) of Pittsburgh, the leading maker of fiberglass and protective coatings for the wind turbine housings and blades, and the [Zoltek Corporation](#) of Bridgeton, Mo., the world's dominant supplier of carbon fiber for the support struts inside the most high-tech blades.

A report last month by IHS, a global data company, concluded that Chinese wind turbine makers would soon start exporting. That is because Chinese wind farm installations could level off temporarily as the power grid struggles to install enough high-power lines to use all the electricity wind produces.

Asked whether European turbine manufacturers risked sharing Detroit's overconfidence in the 1970s in the face of challenges from Japan, Mr. Wuttke said that European makers believed that their reputations for quality and reliability would protect them.

Source: The New York Times

Date: 7/14/2009

Link: [http://www.nytimes.com/2009/07/14/business/energy-environment/14energy.html?\\_r=1&hp](http://www.nytimes.com/2009/07/14/business/energy-environment/14energy.html?_r=1&hp)

## US to press China on tariffs on clean energy trade

The United States will press China this week to lower its tariffs on clean energy technology as one of many steps the two countries can take to fight global warming, U.S. officials said on Monday.

"Both China and the U.S. have much to lose from potentially devastating impacts of climate change, but much to gain by partnering to develop clean energy technologies that will power our economy by cutting carbon emissions," David Sandalow, assistant secretary of energy for policy and international affairs policy, told reporters in telephone conference call.

He spoke shortly before U.S. Energy Secretary Steven Chu and Commerce Secretary Gary Locke were headed to China to explore ways the world's two biggest greenhouse gas emitters could work together to address climate change.

Locke, who was departing from San Francisco, wants to begin talks "on how to accelerate and enhance the role of the private sector in driving cooperation, investment and trade in clean energy," Travis Sullivan, policy director for Commerce Department, told reporters.

The two countries have tremendous trade opportunities in areas such as wind power, energy efficiency, clean coal and modernizing the electric grid, but U.S. companies face high tariffs on some exports, Sullivan said.

They also worry about Chinese practices that favor domestic companies and weak intellectual property rights protection that puts their patented products at risk, he said.

At the same time, Locke will listen to China's concerns about U.S. export controls that restrict sales of some high-technology goods, Sullivan said.

This week's talks set the stage for "possible agreements in the weeks and months ahead," Sandalow said.

But he emphasized Locke and Chu are not going to China "to negotiate the details of the new climate treaty" that countries are striving to conclude this December in Copenhagen.

Many experts believe close cooperation, perhaps even a bilateral deal, between the United States and China is needed for the Copenhagen meeting to succeed.

But so far, China is resisting setting a hard cap on greenhouse gas emissions that many believe is necessary for the U.S. Senate to approve any climate treaty.

"We think China needs to make a significant commitment ... in order to address the climate problem," Sandalow said, noting that the country is "already doing a lot to cut emissions" and to boost energy efficiency.

"It has strong goals with respect to renewable energy and nuclear, but both our countries are going to have to do more in the years and decades ahead," Sandalow said.

Source: Reuters

Date: 7/13/2009

Link: <http://www.reuters.com/article/latestCrisis/idUSN13163794>

## Energy cooperation urged at think tank

Leaders of the world's energy and environmental sectors gathered in Beijing early this month to brainstorm on how to develop a cleaner, sustainable energy supply for the world's second-largest energy consumer, as well as the rest of the world.

Their agenda were not always the same at the energy and environment track of the China Global Think Tank Summit.

For example, during discussions on alternative energy technologies, representatives from Saudi Arabia warned that participants should not overlook the continuing value of traditional energy resources such as oil.

Despite such differences, consensus was reached on the need to reach some level of international cooperation to address an energy crisis that now is global.

What the world witnessed last year with a spike in summer energy prices was a lack of investment in energy-producing countries, said Gerard Lyons, chief economist and head of the global research division of London-based Standard Chartered Bank.

Over the past few years, China increased outward investments in energy-producing countries, boosting the energy production capacity of the entire country.

"This is a good thing," Zhang Guobao, head of the National Energy Administration, said in the opening speech at the meeting.

"Chinese energy companies launched several successful cooperation projects with resources-rich countries in the exploration and operation of energy sources, either through joint ventures or acquisition or outsourcing or technological support. Now we are offering these countries bank loans, and that's a new way of cooperation," Zhang said.

In addition to bank loans, these countries also benefited from the creation of jobs, he said.

By the end of April, China invested close to \$46 billion in foreign natural resources, including hydrocarbons.

Total foreign investments made by Chinese oil companies -- including those by the world's second-biggest oil company, PetroChina, and Asia's largest refiner, Sinopec -- are expected to rise to 280 billion yuan in 2015, up from 190 billion yuan last year, according to the central government's report on China's energy needs.

China's improved investment system has also created favorable conditions for its home capital to go global, said Zhang Monan, an economic researcher with the State Information Center.

The country has implemented numerous policies and pro-active measures to boost its foreign direct investments.

Earlier this year, the Ministry of Commerce published a regulation on outbound investment management, encouraging investments and acquisitions by domestic enterprises.

The State Administration of Foreign Exchange is expected to issue a draft regulation for improving exchange management of outbound investments by domestic bodies that would simplify registration procedures.

The Ministry of Commerce is now drafting regulations on the management of foreign labor cooperation and also foreign investment cooperation.

"China faces an ever-improving external environment for its outward capital expansion. A series of purchase, investment and acquisition moves by China's enterprises have demonstrated to many countries that a rapidly flourishing China will help pull other economies out of the crisis," Zhang Monan said.

However, many tend to interpret the message of this intended win-win solution as China's ambitious energy acquisition strategy to secure its energy sources.

"So far, many foreign companies were unwilling to be acquired by Chinese companies, but at the same time, they wanted China's money," Fu Chengyu, chairman of China National Offshore Oil Corporation (CNOOC), said in June.

CNOOC initiated an \$18.5 billion bid for an American oil company, Unocal, in 2005 and failed. The biggest offshore oil producer in China is now preparing a bid to buy a minority stake in the Argentinean unit of Repsol YPF SA.

"We have to get the message out that China wants a win-win solution, not to kick someone while they're down," Fu said.

China's oil companies have made many landmark overseas acquisitions in recent months.

Asia's largest refiner, Sinopec, agreed to acquire Canada's Addax Petroleum for C\$7.2 billion in a deal announced last week, just days after PetroChina bought a 45.51 percent stake in Singapore Petroleum.

### Clean energy

In addition to cooperation among countries in investments in energy-producing countries, the Think Tank meeting also addressed the need to cooperate on clean energy technologies.

Zhang Guobao of the National Energy Administration said China must decide which of those technologies has the most promising future to avoid wasting time and resources.

In the opening address of the summit meeting, Zhang Guobao expressed doubts about technologies to make hydrogen a staple of energy supplies, and also about efforts to trap carbon dioxide using carbon capture and storage (CCS) technologies.

Too much energy is required to produce hydrogen for the sake of developing a viable hydrogen energy source, he said.

"We should not be over-optimistic about the future of a hydrogen economy," Zhang said.

Zhang said he believes CCS technologies are too expensive for the limited amount of greenhouse gases that would be captured and stored.

"It (CCS) does not work as well as planting more trees or reducing desertification for carbon sequestration," he said.

Source: China Daily

Date: 7/13/2009

Link: [http://www.chinadaily.com.cn/bizchina/2009-07/13/content\\_8420085.htm](http://www.chinadaily.com.cn/bizchina/2009-07/13/content_8420085.htm)

## China wind power developments



China has announced its plans to construct a number of 10GW wind power bases, in a bid to further boost the development of the country's renewable energy industry.

Zhang Guobao, administrator of the Chinese National Energy Administration, said: "China has worked out the strategy of building large (wind power) bases and integrating them into the mainstream power grid in order to speed up the pace of wind power development in the country."

Vigorously developing renewable energy, including wind power, forms part of the country's ongoing strategy to contribute to the global campaign for combating climate change.

Currently, the world's installed capacity of wind power has reached 120GW, and wind power is becoming an increasing part of the world's energy structure. Although a developing country, China places special emphasis on increasing its use of renewable energy such as wind power. By the end of 2008, the country's installed capacity of wind power had hit over 10GW. The Chinese government also passed the Renewable Energy Law to provide strong legal support to the development of renewable energy in the country.

As part of the estimation in Medium and Long-Term Development Plan for Renewable Energy in China, issued by National Development and Reform Commission, the total exploitable potential wind power resources in the country could reach over 1,000 GW, of which onshore wind power resources would provide about 300 GW with offshore wind power resources around 700GW.

[Sinovel](#) is the first company in China that has the capacity to build MW-level wind turbines. In a bid to enhance its R&D capacity, sharpen its competitive edge in domestic and international markets and accelerate its sustainable development, the company has now set up a R&D center, employing some 200 veteran technology staff members in dedicated wind turbine research.

Sinovel Wind Ltd has sign joint design and development contracts with Austria [Windtec Co](#). It has also signed certification contracts with the [Germanisher Lloyd Group](#).

The construction of the Shanghai East Sea Bridge Wind Power Plant has marked a good start for development of the country's offshore wind power generation.



The first set of 34 wind power turbines for the country's first offshore wind power farm began the construction in March this year. The \$336.56 million project is expected to generate 267 GWh of electricity annually, and will supply clean power to the 2010 World Expo in Shanghai.

To better use wind power resources, Zhang has called for strong efforts to be made to develop offshore wind power resources as offshore wind energy offers higher wind speeds, no occupancy of land resources and smaller impact on the environment.

The economically well-developed eastern areas of the country suffer from a shortage of fossil fuels, but enjoy sufficient offshore wind power resources. It is particularly important to develop offshore wind resources to power the economic growth in these regions.

Shi Lishan, deputy director general of the New and Renewable Energy Department of the National Energy Administration, as well as program director of China Renewable Energy Scale-up Program, said that compared with onshore wind power, offshore wind power generation entails more complicated working conditions, tougher technical requirements and greater difficulties in installation.

All these bring new challenges to turbine manufacturing, project construction, operation and management.

In addition, more attention must be paid to offshore wind power project planning in order to maintain a harmonious relationship with other sectors such as harbors, navigation channels and offshore breeding facilities, and to ensure protection of the environment.

It is projected China's wind power base will reach 100 gigawatts by 2020. In recent weeks, Chinese government officials have confirmed this is their actual goal. The Chinese Wind Energy Association, a state run agency, recently issued a report containing what it calls conservative and positive projections. The conservative target for 2020 was 108 gigawatts of wind generated electricity. The positive target was 132 gigawatts. No matter whose data or forecast you use, aggressive growth in China's wind sector is expected to extend well beyond the next decade.

Many companies are already capitalizing on this sector growth in a substantial way by selling wind turbine core electrical components to customers like Sinovel Wind, [General Electric \(GE\)](#) and [Vestas Wind Systems](#) (VWDRY.PK)

Source: Seeking Alpha

Date: 7/13/2009

Link: <http://seekingalpha.com/article/148404-chinese-wind-power-developments>

## Blown away by a Beijing wind farm



*Greenpeace provides an account of visiting a wind farm in Guanting, near Beijing. See [the full article](#) for more pictures and details.*

Source: Greenpeace.org

Date: 7/13/2009

Link: <http://www.greenpeace.org/china/en/campaigns/countdown-to-copenhagen/beijing-wind-farm>

## XEMC JV pockets RMB 590M additional capital



Hunan-based XEMC Group and Xiangtan Electric Manufacturing (600416.SH) signed an agreement July 13 to increase the registered capital of their joint venture, Hara [XEMC Windpower Co. Ltd](#), by RMB 590 million, reports In-en.com. The JV was set up with RMB 310 million in registered capital, 51% from Xiangtan Electric Manufacturing and 49% from XEMC Group, said the report.

Source: JLM Pacific Epoch

Date: 7/14/2009

Link: [http://www.jlmpacificepoch.com/newsstories?id=152791\\_0\\_5\\_0\\_M](http://www.jlmpacificepoch.com/newsstories?id=152791_0_5_0_M)

Portugal's EDP to invest up to \$441M in wind farm in China



[Energias de Portugal](#) and Chinese wind turbine company Wenzhou Huali Windpower have signed an agreement to invest between USD 294m and USD 441m to explore the possibility of developing a wind farm in eastern China, according to a deal.

"We are the technology partner and went to services in the project, whose investment in the initial phase is budgeted at roughly 200 million euros", EDP's Macau-based subsidiary EDP Energy Solutions chief executive Joao Marques da Cruz said, according to Portuguese news agency Lusa. "Within three months everything is ready."

Wenzhou, Zhejiang Province-based Wenzhou Huali Windpower will be responsible for the investment. The two companies will jointly develop wind power projects in central Jiangsu Province, southern Zhejiang Province, and northern Fujian Province.

Source: New Energy Finance  
Date: 7/14/2009

Suntech announces 1.8GW projects



Photovoltaic (PV) module manufacturer [Suntech Power Holdings](#) (NYSE:STP) has entered into strategic agreements with various Chinese regional governments to develop projects with a total capacity of 1.8GW, the company announced July 13. The company detailed the projects as being a 300MW project in Shaanxi province and a 500MW project in Qinghai, as well as two other previously announced 500MW projects, one in Shizuishan, Ningxia and the other in Panzhihua, Sichuan province. According to the announcement, the projects require approval from the National Development and Reform Commission, as well as the company attracting project financing and investment.

Source: JLM Pacific Epoch  
Date: 7/14/2009  
Link: [http://www.jlmpacificepoch.com/newsstories?id=152634\\_0\\_5\\_0\\_M](http://www.jlmpacificepoch.com/newsstories?id=152634_0_5_0_M)

LDK Solar acquires 70% stake in Solar Green Technology



Chinese solar wafer manufacturer [LDK Solar](#) (NYSE: LDK) has announced the acquisition of a 70% stake in Italian solar system integrator [Solar Green Technology](#) to strengthen its presence in the Italian PV sector.

SGT will provide project opportunities and technical support in terms of realisation and control of PV turnkey plants to LDK Solar.

A spokesperson from SGT said that the investment will enable SGT to grow rapidly through several projects in Italy and throughout Europe.

Separately, LDK signed a framework agreement on 6 July to establish a 500MW PV plant and construct solar rooftop projects in Qinghai Province.

Source: New Energy Finance  
Date: 7/14/2009

ReneSola silicon plant brought on-stream



Solar wafer manufacturer [ReneSola](#) (NYSE:SOL, AIM:SOLA ) has begun trial production at the first phase of its two-phase, 3,000 metric tonne (MT) per annum polysilicon plant in Sichuan province, the company announced on July 14. The 1,500MT per annum second phase is scheduled for completion in September this year, according to the report.

ReneSola previously announced it expects full year revenue at around \$500-550 million on 450-500MW wafer shipments.

Source: JLM Pacific Epoch  
Date: 7/14/2009  
Link: [http://www.jlmpacificepoch.com/newsstories?id=152794\\_0\\_5\\_0\\_M](http://www.jlmpacificepoch.com/newsstories?id=152794_0_5_0_M)

ET Solar secures \$14.6M credit facility



Chinese integrated PV maker [ET Solar](#) has announced that it has secured a CNY 100m (USD 14.6m) credit facility from China CITIC Bank.

The facility has a one-year tenure and is renewable at maturity upon satisfactory review by the bank. The new facility brings the bank's total credit commitment to ET Solar to up to CNY 150m (USD 22m).

Source: New Energy Finance  
Date: 7/14/2009

Chaori Solar plans Shenzhen IPO



[Shanghai-based Chaori Solar Energy Science & Technology](#) plans to apply on July 15 to list on the Shenzhen Stock Exchange, reports Nengyuan.net. Chaori Solar intends to issue 40 million shares to raise RMB 600.89 million, which it intends to use for a 100MW solar cell plant, the report said.

Source: JLM Pacific Epoch  
Date: 7/14/2009  
Link: [http://www.jlmpacificepoch.com/newsstories?id=152781\\_0\\_5\\_0\\_M](http://www.jlmpacificepoch.com/newsstories?id=152781_0_5_0_M)

China clarifies biomass energy utilization goal in 2010

It is reported China's major goal for biomass energy development in 2010 is as follows: biomass power generation capacity to reach 5.5 million KW, biological liquid fuel to reach 2 million tons, the annual consumption of biogas to be 19 billion cubic meters, biological solid molding fuel to hit 1 million tons, and the annual consumption of biomass energy accounting for 1% of that of primary energy, Xinhua reported.

Reportedly, the Ministry of Finance will render four fiscal and taxation support policies to China's biomass energy and biochemical industries, including flexible subsidies to loss-making enterprises, raw material bases, and demonstrative projects, as well as tax incentives, so as to provide a forceful guarantee for the healthy development of China's biomass energy and biochemical industries.

In addition, the Ministry of Science and Technology will invest, during the "11th Five-Year Plan" period (2006-2010), 150 million yuan to implement "Agriculture and Forestry Biomass Project", a major project

in the National Key Technology R&D Program, in a bid to carry out studies on biomass energy and biochemistry, and provide technical support for the biomass energy industry.

Source: China Energy Net

Date: 7/13/2009

Link: <http://www.china5e.com/en/ennews.aspx?newsid=3ddceed1-6922-4602-a601-c81e4ad9f1a5&panelv=%u56fd%u5185%u8d44%u8baf&classv=%u65b0%u80fd%u6e90&pageid=1>