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General Energy Issues

Sino-US co-op urged for energy efficient future

February 27 (Xinhua) -- Liu Qi, deputy head of China's National Energy Administration, said Thursday that both China and the United States shoulder the important mission of promoting energy security and global sustainable development.

"The two countries could further cooperation on a wide range of areas in the development of economic and energy sectors against the background of economic globalization," Liu told a forum on "Developing Effective Mechanisms for Energy Efficiency Implementation in China".

Jon Wellinghoff, acting chairman of the U.S. Federal Energy Regulatory Commission, said enhancing energy efficiency in China and the United States presented the best opportunity to curb global warming, as the two countries together consumed approximately one third of world's energy.

"Tackling the energy and environmental challenges is in the mutual interests of our two nations. The two countries should work together in achieving our energy and environmental goals," Wellinghoff said.

Promoting energy efficiency was set as the sixth goal during the fifth round of China-U.S. Strategic Economic Dialogue held in December in Beijing.

Energy efficiency was the best way to meet energy and environmental goals, while the two countries could work together in policy support, information exchange, and sharing best practices, Wellinghoff said.

Steven Chu, U.S. Secretary of Energy, said in a videotaped address that the greatest challenges today were global and demanded global cooperation. The United States must work closely with China, India and other nations to fundamentally transform the way energy was used and produced.

"We need to make our homes, offices, and factories more energy efficient. And we must develop new sources of clean, renewable energy that will power the world economy for decades to come," Chu said.

The Chinese government has set a goal of reducing energy consumption per unit GDP by 20 percent in the five-year period from 2006 to 2010.

Energy intensity, the amount of energy it takes to produce a unit of GDP, fell 4.21 per cent year-on-year in 2008 in China, a larger decline than the 3.66 per cent recorded in 2007.

Energy ties fuel friendly relations

February 23 (China Daily) –During President Hu Jintao's state visit to Saudi Arabia and four African nations, the Chinese leader reiterated that the nation should deepen friendly relations with those countries, with energy cooperation playing an important part in this.

Mohammed Al-Madi, regional vice-president and chief representative of Saudi Petroleum Ltd Beijing Representative Office, has no doubts that cooperation with China is valuable to his firm and country.

"The volume of our crude trade with China has been steadily growing in recent years," said Al-Madi, whose company is an affiliate of Saudi Aramco, the national oil company of Saudi Arabia.

In 2007, Saudi Aramco exported nearly 23 million tons of crude oil to China's largest refiner Sinopec, at an average rate of 460,000 barrels per day (bpd). Last year the figure was around 32.4 million tons, at an average of 650,000 bpd.

It is expected that by 2010, the average rate will increase to 1 million bpd, and by 2015, the rate will grow to 1.5 million bpd, said Al-Madi.

Saudi Aramco established a sales and marketing subsidiary office in Beijing in 1998, at a time when China's crude oil imports were small. "Since then, we have established close supply relationships with China's leading refiners - bonds that will continue to strengthen over time," said Al-Madi.

Along with Sinopec, Fujian province and ExxonMobil held an inauguration ceremony in 2007 to mark the formal government approval of joint venture contracts and the granting of business licenses for two joint ventures - Fujian Refining & Petrochemical Co Ltd and Sinopec SenMei (Fujian) Petroleum Co Ltd.

The two ventures, with a total investment of around $5 billion, are among China's first fully integrated refining, petrochemical and fuel marketing projects with foreign participation.

"Synergies from these two world-scale, integrated businesses, closely coupled with the strengths of the four partners and a long-term crude supply agreement with Saudi Aramco, significantly enhance the competitiveness of this project, and help ensure its world-class performance," said Al-Madi.

"It will also boost the development of China's petrochemical industry and contribute to the economic development of Fujian province," he pointed out.

Saudi Aramco is the world's largest oil corporation in terms of proven crude oil reserves and production. Its business covers a wide range, including oil and gas exploration, oil refining and distribution, and international shipping.

As the world's largest oil producer, Saudi Arabia is also the largest source of China's oil imports. Customs figures showed that China imported around 36 million tons of crude from the country in 2008, an increase of 38 percent year-on-year.

China imported 179 million tons of crude oil in 2008, an increase of 9.6 percent from a year earlier. Imports accounted for 48 percent of the nation's total crude oil demand, 1.8 percentage points higher than the previous year.

According to a recent report from the State Information Center, 55 percent of the country's oil consumption will be met by imports in 2010, with the figure rising to 66 percent in 2020.

Cooperation with Africa

China National Petroleum Corp (CNPC) has formed five overseas oil and gas cooperative regions, in Africa, Central Asia & Russia, South America, the Middle East and the Asia-Pacific.

Although it has operations in many parts of the globe, Africa is where the firm has had its longest and biggest overseas presence.

Last October, the company inaugurated the construction of two refineries in N'Djamena, capital of Chad, and in Chad's neighbor Niger.

The Chadian joint venture refinery is scheduled to start operations by 2011 with an annual capacity of 700,000 tons of gasoline and diesel, 20,000 tons of kerosene and 60,000 tons of LPG.

On Sept 20, 2007 CNPC and the Chadian petroleum minister signed an agreement on the establishment of the joint venture.

The refinery in Niger is 950 km east of Niamey, the country's capital, and will be able to refine 20,000 barrels of crude oil per day. It is expected to become operational within three years.

CNPC struck a $5 billion deal with Niger's government in June 2008 to pump oil from the Agadem block within three years and build a 2,000-km pipeline to export it.

CNPC had expanded its oil and gas businesses to 29 countries by the end of 2008. A total of 75 projects are currently underway in those countries.

By the end of last year, CNPC had provided engineering and technological services to 44 countries and regions, and exported materials and equipment to 69 countries and regions.

Mixed energy forecast

February 9 (China Daily) -- Support for China's non-thermal energy industries appears to have gone up last year, not down, contrary to the assumption that the global credit crunch would dampen investment as well as energy demand.

However, many observers believe the picture may not stay as rosy this year if the government fails to lend official support to solar power and establishes global standards when it comes to wind power. Nuclear energy, however, is getting a big green light.

Statistics released by the China Electricity Council (CEC) early last month showed that last year's investment by the clean energy industries, especially for hydropower, nuclear power and wind power, went up by large margins against a global economic slump.

Investment in wind power and nuclear power infrastructure last year rose by 88 percent and 72 percent respectively over 2007, the CEC said. In contrast, the country's investment for the construction of thermal power plants declined by 22 percent year-on-year.

However, low crude oil and coal prices may make the pursuit of alternative energy less attractive.

"People might still have some interest in the renewables, but they are no longer crazy about them. The economic crisis will cause a decline in renewable energy project activity through 2009," said Zhou Tao, analyst with Great Wall Securities.

Doubled by the fact that China's energy demand went down dramatically as the global financial crisis slowed the economy, the "disadvantage" of costly clean energy would loom larger, said Zhou.

China's electricity consumption fell 8.6 percent from a year earlier in November and 3.7 percent from the same month the year before in October - its first such decline since 1999.

"In addition, they will be facing difficulties in raising funds from the lackluster stock market as well as the banks, which are tightening lending rules," Zhou said.

Good news is that the Chinese government recently promised to offer more support to the renewable energy industry.

A plan will be issued in the first half of this year for subsidies for power generation projects based on renewable energy in the second half of 2008, according to Huang Shaozhong, an official with the State Electricity Regulatory Commission of China.

From October 2007 to June 2008, subsidies of nearly 2 billion yuan were provided to 148 renewable energy projects.

The financial crisis has brought down prices and demand of raw materials, such as steel and silicon. "This is good news for the wind turbine and solar panel manufacturers," Zhou said.

Hydropower

Last year marked a milestone in the development of China's clean energy industry.

The capacity of newly installed hydropower systems, about 20.1 gW, peaked in 2008 and the use of large hydropower systems in China grew by 19.5 percent, accounting for around 16.4 percent of the country's total output.

China's coal-fired power plants are still the major power generator, contributing about 80 percent of the total supply.

In addition to China's large hydropower stations, such as the Three Gorges project, Longtan project and Xiluodu project in southwestern China, the country also gets a significant portion of its electricity from tens of thousands of small hydro stations in rural areas. In 2008, there were 50,000 such micro-hydro stations in China, supplying one-quarter of the population with electricity.

Nuclear power

Zhang Guobao, head of the National Energy Administration, told People's Daily a couple of weeks ago that the country would devote more efforts to boost nuclear power sector in the years to come. "Nuclear power is an ideal option to improve our energy mix," he said.

The current installed capacity of nuclear power is about 9 gW, or 1.3 percent of total installed electricity generating capacity. It provides 2.3 percent of China's power.

The country's goal is a total installed capacity of 12.1 gW.

This year China will start building four nuclear power plants in Haiyang, Rongcheng in eastern Shandong province, Sanmen in eastern Zhejiang province, and Yaogu in southern Guangdong province.

According to a statement Zhang made earlier in 2008, China would try to raise the proportion of it nuclear power to 5 percent of the total installed generating capacity by 2020, up 1 percent from the goal set in 2006.

Wind power

Domestic wind power generation capacity grew by 4 gW to 10 gW in 2008. China's wind power investment is growing at a rate that is the second fastest in the world, only after the US, according to Zhang. And the goal to raise its total generation capacity to 100 gW by 2020 seems more achievable.

But problems are blowing in the wind.

Data from CEC showed that wind accounted for 1.1 percent of the overall power generation capacity in the country last year and a meager 0.3 percent of its total electricity generation.

For the moment, production from turbine makers and investment by remote generators is moving far swifter than the grid. China is also slow on reaching global standards for turbine efficiency, but should overcome this because its wind-power industry produces several world-class turbine manufacturers.

Though Chinese law requires the country's two state-owned power grid operators to provide connections and buy up all renewable energy, they have been slow, especially as wind farms are often remote and wind power generation fluctuates, depending on the weather.

"China's concession bidding model prefers a low-price-bidder-wins system, so China will not get reliable quality wind farms to do it," said Michael Eckhart, president of the American Council On Renewable Energy. "You have to evaluate the bids for quality and give awards based on quality but not just the lowest price," he said.

In the same statement made to People's Daily, Zhang promised that China will soon create a "favorable policy" to spur the birth of big wind farms and to connect them to big power grid. Large-sized wind farms are being planned at Gansu, Hebei and Jiangsu provinces as well as Inner Mongolia autonomous region.

Solar power chills

The absence of incentive policies for the solar power industry is also be the major problem that holds back its development.

"The government has showed their support for the wind industry, but it never did so for the solar industry," State Council counselor, Shi Dinghuan, said in November. "Without an articulate and practical pricing mechanism for on-grid solar electricity or government subsidies, solar electricity will not have a market here in China.

The Chinese government detailed its incentive policies for the wind industry in its new Renewable Energy Law and it also set an ambitious target to have 30GW of wind power by 2020.

"The Renewable Energy Law has been effective for two years, but it has not really benefited the solar power industry," he added.

According to Eckhart, the United States government passed an investment tax credit for solar energy in October and extended that for eight years. "This kind of long-term commitment is good and all governments should do it like this," he said.

Statistics shows that there are more than 70 grid-connected photovoltaic projects in China, but only two of them received feed-in tariffs, and most of them have not benefited through the Renewable Energy Law.

China's energy industry needs more reform

February 5 (Xinhua) - China's energy industry needs more reform to pull through the difficulties of the economic chill worldwide, said Zhang Guobao, head of the National Energy Administration (NEA) on Wednesday.

"World financial crisis has brought a negative impact to China's economy, and the country's energy sector is no exception," Zhang said during a speech at the national energy work conference.

He said Chinese enterprises face great difficulties amid a weak world demand. As a result, the energy industry also saw its demand greatly decreased.

Zhou Dadi, a researcher with the energy research institute of the National Development and Reform Commission echoed Zhang, saying slowed growth in energy-intensive industries, including steel and iron, would no doubt drag down energy consumption.

Official statistics show China consumed 2.74 billion tons of coal in 2008, up 4.5 percent over the same period last year. However, the growth rate was 1.6 percentage points less than that in 2007.

"However, China's energy industry can still expect vast development potential, because the huge population dictates a huge demand," said Zhang.

He noted that the government should make further efforts to raise energy utilization efficiency, reduce pollution and save energy.

According to the country's plan for 2009, efforts will go toward shutting down small coal plants, small coal mines and oil refinery plants responsible for high energy consumption and environmental pollution.

The country will also work toward developing a new energy industry including nuclear power, water resources power and wind power.

Energy sector rises to the challenge

February 16 (China Daily) - The deepening financial crisis has put China's energy industry in a tougher situation: energy demand is dwindling, production is sagging, stockpiles are rising, and energy companies are competing to cut prices. Meanwhile, the nation's giant oil and electricity firms are losing money by a large margin.

However, the temporary energy glut will not stop China from expanding energy output: it needs more when its economy starts to recover.

This simple fact means that the nation's energy watchdog is well prepared for the upturn in economic development.

China recently decided to step up the construction of nuclear power stations, wind farms and solar power stations. This is a welcome policy change in this coal-dependent country as it will help restructure the nation's energy mix and offer more green jobs for floods of laid-off workers.

As part of China's stimulus package to revive its economy, National Energy Administration Director Zhang Guobao announced that the nation plans to work on "at least" four nuclear power stations in 2009.

His announcement came after China launched construction of three nuclear power stations in October last year. This really is a U-turn in power policy compared to the past three decades, when China built less than 10 nuclear power plants in coastal areas.

This change is being promoted by the economic downturn and China's growing ownership of key technologies in nuclear power construction. Further boosting the development of nuclear power, according to Zhang, is an important way for China to restructure its energy mix.

Compared with coal-fired, which now accounts for over two-thirds of the country's power generation, nuclear energy is more energy-efficient and environmentally friendly. China is aiming to have a nuclear power capacity of 60 gigawatts by 2020, a 50 percent jump from the earlier target outlined in its energy blueprint.

The National Development and Reform Commission (NDRC), China's top economic planning body, is considering revising the target in its medium- and long-term plan (2005-20) in the first quarter of 2009 and submitting the revised plan to the State Council.

According to the earlier plan for the industry, China would increase its nuclear power capacity to 40 gigawatts by 2020, accounting for 4 percent of the nation's total power capacity. China currently has only 9 GW of nuclear power capacity, or about 1.3 percent of its total.

Meanwhile, construction of nuclear projects is an effective way to boost domestic demand, as they require large amounts of investment and can boost many industries such as steel and cement. As a result, nuclear power companies have recently received capital injection both from the government and banks.

China National Nuclear Corp, China's largest nuclear company signed agreements with eight domestic banks, under which the company got bank facilities of 350 billion yuan, and it also signed agreements with 10 banks for 11.8-billion-yuan in loans in 2009.

At the same time, industry insiders said that too many coal-fired power plants are in the process of being built, which will further contribute to the overcapacity situation. China's power capacity will exceed 800 GW in 2009, up from a little over 700 GW.

The Chinese government is well aware of this problem. Recently, it introduced stricter environmental standards to stop the construction of polluting coal-fired plants. At the beginning of January, the Ministry of Environmental Protection revealed that 11 big projects in the country's stimulus package, involving more than 40 billion yuan in investment, had not won its approval following environmental impact assessments. Most of them are coal-fired projects.

This appears to be a continuation of the policy implemented in 2008, as statistics indicated that the country slowed down investment in coal-fired plants. The China Electricity Council said in January that the country's nuclear and wind power investment soared in 2008, while investment in coal-fired plants declined year-on-year.

Nuclear and wind power investment increased by 71.85 percent and 88.10 percent respectively compared with the same period in the previous year, while thermal power investment dropped 21.99 percent, according to the council. China's total power generating capacity reached 790.25 million kW in 2008, up 10.3 percent year-on-year.

However, China's electricity consumption fell 8.6 percent from a year earlier in November and 3.7 percent from the same month the year before in October - its first such decline since 1999.

Meanwhile, two large solar power plants will be built in the western provinces of Qinghai and Yunnan in 2009, as China cuts its reliance on coal and oil. Construction of the first phase of the Qinghai project, a gigawatt-level solar station, will begin this year. The plant, funded by an initial investment of 1 billion yuan, could become the world's largest when completed, according to a recent statement by its developers.

In December 2008, the southwestern Yunnan province announced it would begin construction of a 166-megawatt solar plant with an investment of 9.1 billion yuan - the largest in China at the time.

Overseas cooperation

Meanwhile, Chinese energy investors have been encouraged to "become bold" in acquiring stakes in overseas enterprises. That's the message from Zheng Xinli, vice-director of the Policy Research Office of the Central Committee of Communist Party of China.

He suggested recently that China should use its 2-trillion-dollar foreign exchange reserves to encourage overseas mergers and acquisitions, especially in energy and resources.

He said that the foreign exchange reserve should be invested in removing energy and resource bottlenecks that have hindered the country's development for so long. Zheng said the Chinese government should cooperate with investors, if necessary, by offering preferential loans to improve infrastructure of the destination countries.

As an advisor directly serving China's highest leadership, Zheng's suggestions are likely to become the central government's policy to boost overseas investment with the priorities being exploring overseas oil, gas and other mineral resources.

Amid global recession, many resource-exporting countries have pinned their hopes on manufacturing-led countries. This is a mutually beneficial solution for China and the rest of the world.

King coal losing his power in electricity industry

February 16 (China Daily) -- China is likely to continue cutting investment in coal-fired power plants as the lackluster economy may result in a power glut this year, but it will increase its efforts to build more nuclear reactors and wind farms to improve its energy mix, according to Zhang Guobao, head of the National Energy Administration (NEA).

Speaking at a recent meeting on the nation's energy strategy, Zhang said the country's investment in the power industry is expected to reach 580 billion yuan this year.

However, in its power industry investment forecast published on Feb 14, the China Electricity Council (CEC), a government-backed industry association, said investment may hit 650 billion yuan this year, encouraged by the government's 4 trillion yuan economic stimulus package.

According to the CEC forecast, investment in power generation may remain around 300 billion yuan, with more of it going to sectors such as nuclear power, while the remaining 350 billion yuan will be assigned to build and upgrade power grids.

Electricity demand will remain weak this year, but it is likely to rebound in the second half and may increase by 5 percent this year, CEC said.

China is speeding up the approval of energy projects to help spur domestic industry, which expanded in the last quarter at the weakest pace in seven years.

"Large-scale energy projects require huge investment and could give a boost to manufacturers and raw material suppliers," Zhang told People's Daily on Dec 29.

As China implements a more active fiscal policy, with a lower interest rate and more tax incentives, investment in large-scale power projects will be less costly, Zhang pointed out.

The country will begin construction of nuclear power plants with a total capacity of 8.4 gigawatts this year alone, including projects in Sanmen of Zhejiang province, Taishan in Guangdong province and Haiyang in Shandong province, according to Zhang.

"Starting from this year, the country will build several large wind farms over the next 10 years, each with a generating capacity in excess of 10 gigawatts, in Gansu, Hebei and Jiangsu provinces, and Inner Mongolia autonomous region," Zhang said.

The country will also speed up the construction of large coal bases to help the nation withstand potential energy crises. Construction of coal bases will begin in Xilinguole League in Inner Mongolia and Shanxi province.

"In addition, transmission lines will be built to link coal-fired power plants close to these coal bases with Shandong and Liaoning provinces," Zhang said.

China currently relies on coal-fired plants to supply about 80 percent of its total energy needs. However, transporting coal by rail can often be problematic, as shown by the damage caused to the nation's railway network by last year's massive snowstorms.

The authorities were then forced to shut many coal-fired plants, leading to blackouts in many cities, he said.

Spending on coal-fired plants will be less aggressive this year. "As much as 80 gigawatts in generating capacity may be added this year and 80 percent of this will come from large generators with a capacity of more than 300 megawatts," the CEC report said.

The oversupply of electricity offers a "good opportunity for China to optimize its power industry" by shutting down small, polluting coal-fired plants, said Zhang.

"We will try to phase out small plants with a total capacity of 13 gigawatts this year," he said.

Nuclear expansion

China may soon revise its energy development plans to nearly double its nuclear power capacity in the next decade, according to sources close to the NEA.

The authorities will also "start building eight more nuclear power plants in the next three years, with 16 reactors whose total installed capacity will surpass 10 gigawatts", NEA sources were quoted as saying by the 21st Century Business Herald.

There are currently 11 nuclear reactors in operation in the country with a combined capacity of about 9 gigawatts, supplying around 1 percent of the country's energy needs.

NEA head Zhang Guobao last year said the country would raise the share of nuclear power in the national energy mix from 4 percent in 2006 to 5 percent by 2020. The target capacity for nuclear power was set at 40 gigawatts by 2020.

The revised energy development plan aims for nuclear power to generate 70 gigawatts by 2020.

Beijing to get solar thermal power

February 19 (China Daily) -- China will begin constructing Asia's first 1.5-megawatt solar thermal power station in suburban Beijing next month.

Designed by the China Academy of Sciences, the station is expected to cost 100 million yuan and is likely to power at least 30,000 homes when it starts operating in 2010, Wang Zhifeng, chief designer of the plant told **China Daily** in an exclusive interview.

The plant, covering an area of 13 hectares, would get funding from the Ministry of Science, the Beijing municipal government and the academy.

Wang, the laboratory director for solar thermal power at the academy, said the experimental power plant would be designed and operated by 10 Chinese institutions and companies, including the academy, Xi'an Jiaotong University, Huadian Corp and Himin Solar Group.

The plant is expected to generate up to 2.7 million kWh of electricity per year, equivalent to eliminating 2,300 tons of CO_2 emissions from conventional power plants, Wang said.

Its solar tower is designed to be 100-m tall and is surrounded by 100 heliostats composed of curved mirrors which track the sun and redirect its rays to a receiver at the top of the tower.

The receiver would convert concentrated solar thermal power from the heliostats into thermal power. Steam from the receiver outlet would be sent directly into the turbine for electricity generation.

Solar thermal power plants are typically much larger than plants made of photovoltaic solar panels that use sunlight to produce electricity.

Wang said large-scale use of solar thermal power would help reduce power cost. The on-grid power price from plants using solar photovoltaic panels is 44 euro cents per kWh while that of solar thermal power is 27 euro cents in countries like Spain.

"Solar thermal power plants cannot be installed as conveniently as solar PV cells, which can also be installed on residents' roofs," said Wang. "The solar thermal power generation system is also more complex than solar PV power plants, as it requires sophisticated technology."

The National Development and Reform Commission, China's top economic planning agency, has said China plans to generate at least 150 mW of power from solar thermal power stations by 2015.

"If the experimental solar thermal power plant is successful, China may soon start commercial operation of solar thermal power stations of at least 10 mW," said Shi Dinghuan, president of China Renewable Energy Association (CREA).

Automobile and Transportation

China to offer rebates on green vehicles

February 19 (CCTV.com) -- China has initiated a programme to promote the sale of green vehicles. The central government will offer cash rebates of up to 600-thousand yuan to buyers of alternative energy passenger cars and buses in 13 major cities. Insiders say the move will help solve the current embarrassing situation in low emission vehicles.

The cash rebates will be offered in 13 major cities, including Beijing and Shanghai, during a trial period. The rebates will include vehicles powered by battery, hybrid technology and fuel cells. The move is aimed to reduce emissions, improve the country's vehicle manufacturing industry and stimulate demand.

The cities involved in the trial will promote these vehicles in the public service sector at first, such as buses and taxis. Vehicle buyers will receive a rebate for around 50-thousand yuan for a small hybrid passenger car. While the rebate for a large fuel cell powered commercial bus will be about 600-thousand yuan.

The government says the rebate system is designed to encourage all auto makers.

Wang Bao'an, director of Dept. of Economic Construction, MOF,says, "we won't designate an auto maker or a car model. We only set standards for the market entry."

China aims to promote the sale of over 60-thousand alternative energy vehicles within four years. Insiders say the rebates for vehicles purchased for the public sector will help boost more development of alternatives to petrol and diesel vehicles.

Wan Gang, Minister of Ministry of Science & Technology, says, "buses have played a crucial role in common people's daily lives. So we want to popularize alternative energy through the exemplary role of buses."

The promotion of alternative energy vehicles in China has been hindered by their high costs. Although these vehicles have had enough technology support, many consumers still can't afford them.

Shou Ziqi, director of Shanghai Association for Science & Technology, says, "the prices of battery powered cars are over two times of traditional ones. While prices of fuel cell powered cars stands at even five times. It's still hard to offset costs completely by saving fuel."

Insiders say the central government's cash rebates will help ease local governments' pressures in promoting such vehicles. But the transition to alternative energy powered vehicles still needs increased investment in related infrastructure development.

Automobile majors have little to worry about

February 20 (China Daily) --- Even as most of the multinational automobile manufacturers are planning heavy workforce cuts worldwide, employees in their China units have not much to worry on the job front.

PSA Peugeot Citroen, Europe's second-biggest carmaker, is the only foreign automaker which has so far said it would trim its headcount in China.

It has cut 1,000 temporary staff at its Chinese venture Dongfeng Peugeot Citroen last November after vehicle sales declined.

The venture, invested by PSA, China's Dongfeng Motor Group Co and other shareholders, previously had 9,000 people on its rolls.

Chinese industry website autoday.com.cn had in December said the venture would reduce its workforce by 8 percent by this March.

Hui Yumei, auto analyst, Sinotrust, a leading automobile industry research company said the Dongfeng Peugeot Citroen layoffs is "necessary because of its ailing performance and really bad sales."

The venture sold 180,800 vehicles last year, down 12.7 percent compared with 2007, the second consecutive year sales fell.

The French automaker announced on Feb 11 that it would further axe 11,000 jobs globally, after the first round of 18,000 staff reductions.

The other major international auto companies, including Volkswagen, Nissan, Toyota and Honda all said they would not cut jobs in China although they have decided to trim workforce in other regions.

"Despite a global workforce reduction of 20,000 Nissan staff, Dongfeng Nissan is planning to increase its recruitment this year," said Toshiaki Otani, general manager, Dongfeng Nissan Passenger Vehicle Co.

General Motors, which is teetering on the verge of bankruptcy, has decided to cut 47,000 jobs globally in its restructuring plan submitted to the US government on Feb 17.

However, "the impact will vary with each region and country, reflecting the business conditions. So, in China we are working to determine how these changes will impact our own operations. We have done some preliminary work and expect the impact to be limited," General Motors China said in an emailed reply to China Daily.

"China is a strategic focus for GM and we need to remain aggressive to maintain our leadership position."

In January, GM, the biggest foreign automaker in China, sold 111,282 vehicles in the nation, up 3.3 percent year-on-year, while some of its rivals reported falling sales.

"If a company still needs to produce enough automobiles, how can it reduce the workforce?" said Hui. Compared with the sales fall in the US and Europe, analysts believe there would be a slight increase in China's automobile market this year.

In January, China has for the first time topped the US in auto sales, with 735,500 vehicles sold domestically. In contrast monthly sales in the US declined 37 percent in January to 656,693 vehicles.

Automakers are plugging in

February 9 (China Daily) -- At the Beijing auto show last April, discussion about alternative-fuel technologies for future vehicles was hot and also varied as the world's automakers pursued strategies for nearly everything from hydrogen fuel cells to ethanol, hybrid, battery and natural gas.

However, it was hard to imagine, following the near meltdown of the US auto industry that the 2009 Detroit auto show was also a gathering of electric vehicles and plans.

Almost every automaker at the show raced to unveil their strategies to create mass-produced electric cars within two or three years, making some wonder: after five years, who could be the ultimate winner in the electric auto industry?

Originally world's biggest mobile handset battery maker, Chinese BYD Auto, backed by billionaire investor Warren Buffett became the focus of Detroit show and hit the headlines in US newspapers for its electric cars, the first mass-produced model in the world which came to the China market in December, priced at around $22,000.

"We are confident of exporting our electric cars to the US market in 2011," said Li Zhuhang, general manager of BYD's auto export trade division.

He also said the BYD electric car will hit the European market "a little bit earlier than entering US market".

Li believes in the company's electric auto future, because "BYD is the first and only one who has 100 percent mastered the core technology of the battery".

However, the Shenzhen-based electric car developer is not the only one plugging into the green energy industry.

Next to the BYD display, General Motors, which was rescued from the collapse by the government loans on New Year's Eve, mobilized more than 600 employees to loudly cheer the debut of its Chevrolet Volt plug-in. The loud message was primarily to the US government saying: we are making progress on green technology to ensure the future of the US auto industry.

The Detroit-based company plans to build a US factory to assemble advanced lithium-ion batteries from LG Chem Ltd of South Korea for its Chevy Volt and put the sedan into mass production in 2010 for a price between $30,000 to $40,000.

Chrysler showed four electric or range-extending hybrid concept vehicles at the show, including the Dodge Circuit EV all-electric sports car, the Jeep Patriot, the Jeep Wrangler Unlimited EV, and the Chrysler Town & Country EV range-extending vehicles.

The electric models will be brought to the market beginning next year through 2013, the year Chrysler is forecasting sales of electric cars will exceed 100,000 annually.

Another US auto giant Ford said it plans to begin the sales of an electric sedan in the US by 2011.

"We're employing a comprehensive approach to electrification that will tackle commercial issues such as batteries, standards and infrastructure," said Bill Ford Jr, the company's executive chairman.

Derrick Kuzak, Ford's group vice president of global product development, said the automaker expects to start selling 5,000 to 10,000 electric vehicles annually.

Toyota, which gained an edge on hybrid vehicles as the owner of the world's best seller Prius, also has the ambitions to sell an all-electric car by 2012 in Japan, Europe and the US, while Nissan, which was not represented at the Detroit show, has said it will sell an electric car in the US as early as 2010.

Even the luxury sedan provider Mercedes-Benz put BlueZero, a battery-only small electric prototype in the center of its stand. The Concept BlueZero, three vehicles with alternative electric drive systems that could travel up to 375 miles on a single charge, are on a production agenda starting from later this year to 2010.

Herbert Kohler, chief environmental officer of the German automaker told China Business Weekly that Mercedes-Benz also plans to produce electric B-Class and Smart cars.

"An electric car is the best solution for zero exhaust for a not too long distance drive," said Kohler.

"Electricity is the future," said Aaron Bragman, an automotive industry analyst at consultancy IHS Global Insight. "Looking around the Detroit show, all roads will lead to that electric destination. It's the most efficient propulsion system we have. It's finally starting to catch up in terms of the technology, and over the next few years there will be a real proliferation of it."

As world's second biggest vehicle market and with the most crowded traffic in major cities, China is definitely a prime destination for electric cars.

China relies on imports for nearly half its oil. "If China continues its current growth rates it will almost double oil imports by 2030," said a recent McKinsey and Co report. "But greater use of electric cars would cut this growth by around a quarter."

Moreover, electric cars could be a more realistic hope for new energy vehicles because they may be the cheapest choice and meet a range of government goals, said the report.

If the electric cars would occupy 30 percent of China's domestic auto market, it will mean a possible 1.5 trillion yuan electric car market for the auto producers and a 40 billion yuan business opportunity to the parts enterprises.

"More importantly, China would go uphill to the top with the electric technologies in the world's third auto technology revolution," said the report.

Along with BYD Auto, China's Dongfeng, Chery, Chang'an and Wanxiang all have made huge investments into electric vehicle research and development.

"If they (Chinese automakers) can succeed in the commercialization of electric cars, China will no more count on foreign turbo engine technologies, and also can compete with international rivals on the same stage," said Jia Xinguang, an independent auto analyst.

"China should be one of the most potential markets for electric cars," said Toshiaki Otani, general manager of Dongfeng Nissan Passenger Vehicle Co.

He said Nissan will bring electric cars to China by 2012.

"It will be an ideal solution as the country seeks to boost sales of fuel-efficient vehicles to protect the environment and cut oil usage."

"They (automakers) are on a right way to electric cars. However, the cost, performance and the efficiency to charge batteries still remains a problem for the sales of plug-ins," said Zhang Xin, an analyst with Guotai Junan Securities.

China automobile sales zoom past US

February 11 (China Daily) -- China has for the first time topped the US in automobile sales last month, as a series of industry and market support measures adopted by the government have begun to take effect.

In January, China sold 735,500 units of vehicles, 14.35 percent less year-on-year amid falling demand, with a slight drop of 0.83 percent from December, China Association of Automobile Manufacturers (CAAM) said yesterday.

The figure still far surpasses the sales dive in the US where monthly sales plummeted 37 percent from last January to 656,693 vehicles, the worst since 1963.

"The sales figures in January were encouraging. It showed how the new government policies helped boost vehicle buys in China," said Zhu Yiping, Associate Secretary General, CAAM.

While the January sales confirmed the market stagnancy since last year, the high domestic automobile inventories came down after automakers cut production whereas demand exceeded expectations.

Automobile inventories fell more than 80,000 units to hit the lowest point in 13 months, said the association.

China produced 658,800 units of vehicles last month, a 20.22 percent drop compared with a year earlier, but an increase of 5.07 percent over December.

The government passed a stimulus package for the once-thriving auto sector last month, halving the purchase tax on vehicles with engine capacity of less than 1.6 liters, and spending 5 billion yuan on subsidies to farmers for replacing three-wheeled vehicles or outdated trucks with small, 1.3-liter or less, vehicles. The moves were aimed at boosting automobile sales in rural areas and promoting more energy efficient vehicles.

As a result, small passenger cars, with engine capacity of less than 1.6 liters, became the only group with rising sales in passenger car segment in January.

Ricon Xia, auto analyst at Daiwa Securities, expected the tax adjustment to boost automobile sales this year by 3-6 percent.

"Such effective measures must trigger a sales rebound," said Yale Zhang, director, Greater China Vehicle Forecasts for US consultancy CSM Worldwide Corp. He believes China's automobile market is set to pick up in the second half of this year.

However, "it's still too early to conclude anything based on a monthly figure that China has become the world's largest automobile market," added Zhang.

And "we should not be proud of being a month's sales champion. It's not reliable and reasonable to compare China auto industry's capacity with the US' by a monthly figure. Currently, the industry should pay more attention and efforts to carry out a detailed restructured plan as a long-term perspective," said Jia Xinguang, an auto analyst based in Beijing.

Automakers shift into high gear

February 9 (China Daily) -- Automobile companies are shifting into high gear and driving into the revved up car market in China in a bid to escape the financial tsunami that has knocked the wind out of the sails of the industry.

What makes the drive to China even more irresistible is the recent stimulus moves announced by the government to bolster new purchases, coming at a time when the markets of the yonder seem to be drying up.

The stimulus package is expected to boost auto sales both in big cities and rural regions, especially for small cars and farming vehicles. The moves will add 300,000 units to market demand this year and also help in the upgrade, reshuffle and integration of the entire industry. Special emphasis has also been laid on developing green energy technology as a long-term consideration.

Purchase tax on vehicles with engines of less than 1.6 liters has been halved and exchange of old vehicles for new ones with smaller engines subsidized. The purchase tax adjustment, from 10 percent to 5 percent, came into effect from Jan 20. A sum of 5 billion yuan has been set aside as subsidy for farmers.

Statistics from China Association of Automobile Manufacturers (CAAM) show that in 2008, cars with engines of less than 1.6 liters sold across the country account for 60 percent of the total sedan market, with volumes of over 3.1 million units.

Lang Xuehong, analyst at auto industry research firm, Sinotrust, said the tax cuts would benefit Chinese brands like Chery, Chang'an and BYD Auto as they mainly produce vehicles with smaller engine sizes.

"The purchase tax cut measure is the most effective tool that the Chinese government adopted for market recovery in the current situation," said Ricon Xia, analyst, Daiwa Securities. The tax adjustment is expected to boost auto sales in China this year by 3 percent to 6 percent, he said.

"China's auto market is set to pick up in the second half of this year and continue its steady progress in the future," said Yale Zhang, director, Greater China Vehicle Forecasts for US consultancy CSM Worldwide Corp. He expects the market to grow at 6 percent this year and maintain a healthy growth rate of around 10 percent starting from 2010.

He added that the measures would also help the country come close to the annual sales target of 10 million units set by CAAM last year. In 2008, automobile sales in China increased slightly by 6.7 percent from the previous year, the lowest in the past decade, according to CAAM.

China was considered to be the fastest growing automobile market in the world with sales growth rates of over 20 percent in the last three years. That is something of the past now, said experts.

But China would also be the first to rebound from the industry stagnation and maintain a steady growth rate, they said. GF Securities expects market demand in the country to recover in the second quarter.

"We continue to hold confidence towards the future of the Chinese auto market. In 2009, Mercedes-Benz will bring an increasingly variant brand experience for Chinese customers through a more diversified product line, caring services and rich brand connotations," said Klaus Maier, president and CEO, Mercedes-Benz (China) Ltd.

Dieter Zetsche, chairman, Daimler AG and head of Mercedes-Benz has promised that the German luxury sedan supplier would "definitely increase the investment in this most potential market".

Kenneth Hsu, spokesman for Ford China, said the US auto giant's financial woes in its home country would in no way derail their expansion plans in China. "We will continue to introduce new products and invest more in China with profits from our local operations," Hsu said.

"The financial crisis and slowdown of China's auto industry won't make us reduce production or sales in China. Instead, we are considering to expand our product portfolio here," said Peter Schwarzenbauer, member of the board, Audi AG.

Cleaner fuel for buses soon

February 17 (China Daily) -- SHANGHAI: A significant reduction in the level of pollution is expected here soon as a "clean-burning hydrocarbon fuel" will be used to power the city's buses starting next month, Shanghai's communication department said.

Ten buses fueled by Dimethyl ether (DME) will start serving the city's No 147 line, running between Hongkou and Yangpu districts from next month, according to a report in the Shanghai Morning Post.

It is expected that the new fuel, which is 10 percent cheaper than diesel oil, will discharge less waste, it said.

As a diesel fuel replacement, DME is a completely sootless synthetic fuel that can be produced from coal, natural gas or biomass, and meets the stringent emission regulations in Europe and Japan.

It also features high cetane, which causes less delay between the start of injection and combustion.

According to Shanghai Urban Construction and Communications Committee, clean and energy-efficient buses are being developed to make the city "greener".

As of now, there are 17 electric-powered buses and 10 mixedly powered ones in operation, said Huang Xiaoyong, an official with the committee. "There are 281 buses powered by natural gas," he added.

Vehicle waste has become a major source of pollution in the city, contributing 80 percent of the air pollution downtown. There are more than 2.5 million vehicles in Shanghai.

In 2007, the Shanghai Municipal People's Congress passed a bill banning vehicles that emit black exhaust. According to the bill, drivers of vehicles emitting black fumes can have their licenses confiscated.

No plan for levying vehicle emission fees in 2009

February 1 (Xinhua) -- Beijing has no plans to impose vehicle emission fees in 2009, Du Shaozhong, deputy-director of the city's environmental protection bureau said on Sunday.

Du made the announcement in response to rumors from local media about possible fees on vehicle emissions.

He said that the Ministry of Environmental Protection had been levying fees for the discharge of water, air and noise pollution, but it had yet to issue a policy on vehicle emissions.

The Beijing Times ran a story on Saturday declaring that Beijing would soon start levying vehicle discharge fees.

"We usually follow the state policies on pollutant discharge fees," said Du. "Beijing had suggested tightening the management on vehicle tail gas after the Beijing Olympics. But relevant state departments are still doing research on the policy."

He said the city has made many efforts to reduce the air pollution caused by vehicles. Among a series of actions, 576 yellow-tagged cars, which refer to vehicles with a higher volume of pollutant discharge than the state standard for urban area, were removed from Beijing before the Spring Festival.

Starting Jan. 1, all the vehicles with yellow tags -- except for those, such as garbage and cargo trucks -- will not be allowed within the Fifth Ring Road. After Oct. 1, they won't be permitted within the Sixth Ring Road, Du said.

"We should approach all forms of fee collection with care because the government has always been trying to abolish redundant fees which burden the people," a commentary in the Beijing Youth Daily said Sunday.

The emissions fee could well be covered by fuel taxes, since the consumption of fuel usually decides how much pollutant a vehicle will discharge, according to the commentary.

Environmental departments have carried out pilot programs on vehicle emission fees in some cities. In 1998, eastern Hangzhou City, central Zhengzhou City and northeastern Jilin City began to collect such fees, with 300 yuan (about 44 U.S. dollars) a year for small-sized cars, and 500 yuan for middle-sized vehicles. However, the fee was canceled in June 2003.

Oil and gas

Three China oil giants's profits forecast to fall 31.3%

February 16 (cnstock.com) -- he amount marked a new low in recent years due to the drastic drop of oil prices in 2008. China Petroleum & Chemical Corp. (Sinopec, SEHK: 0386 and SHSE: 600028), under the wing of China Petrochemical Corporation (Sinopec Group), one of the Big Three, predicted on January 23, 2009 that its 2008 net profits would slump more than 50 percent, told previous reports.

China National Offshore Oil Corp. (CNOOC), another one on the Big Three list, gained profits of nearly USD 10 billion in 2008, disclosed its president Fu Yucheng.

If the changing exchange rate is not taken into account, the profits jumped more than 20 percent from 2007 when its profits totaled USD 7.86 billion. CNOOC, parent of CNOOC Ltd. (NYSE: CEO; SEHK: 0883), reaped sales revenues of USD 29 billion in 2008, rising 22.4 percent year on year, according to the preliminary statistics.

In fact, the whole petrochemical industry witnessed a negative growth in December 2008, which marks that the industry has been on the decline after an about-10-year fast growth.

The Chinese government is to unveil the petrochemical industry adjustment and revitalization plan, which advises the country to separately store 3 million tons, 6 million tons, and 10 million ton of refined oil from 2009 to 2010.

Sinopec Group and China National Petroleum Corporation (CNPC), also one of the three biggest oil producers, are preparing for refined oil reserves, because the fuel prices hover around a low level.

The Chinese government will earmark CNY 100 billion for the upgrading of refined oil products and about CNY 400 billion for the construction of 20 new related projects in 2009 and 2010, said sources. The CNY 100 billion will possibly be offered by CNPC and Sinopec Group, guessed they.

This year, the country will put CNY 60 billion into the quality improvement of 60-million-ton gasoline in accordance with the National Emission Standard Phase III and Phase VI.

Next year, it will inject CNY 40 billion into the quality upgrading of 60-million-ton diesel oil to meet the III and Phase VI standards, which require low sulfur.

Sinopec Group pointed out that domestic retail oil prices would become stable, once it expanded refined oil reserves when the fuel prices stood at USD 40 per barrel.

(USD 1 = CNY 6.84)

China prepares to buy up foreign oil companies

February 22 (Asia Energy) -- This proposal may risk a backlash from countries who fear that China is using the world's economic crisis to tilt the balance of trade and diplomacy in its favour.

A conference of officials from the National Energy Administration has agreed to consider establishing a special fund for China's state-owned companies to buy oil and gas firms overseas. The beneficiaries would be the Beijing's three giant energy companies - Petrochina, Sinopec and CNOOC.

"Firms will be able to benefit from low-interest loans and, in some cases, direct capital injections," according to China Petroleum Daily.

This state money would be used to fund takeovers or mergers with resource companies abroad. Which foreign firms, if any, have been identified for takeover has not been disclosed. But the dramatic fall in oil prices since last summer, and the strains caused by recession, have driven down the share prices of many energy companies, making them more affordable targets for predatory competitors.

Jiang Jemin, the chairman of Petrochina, recently remarked that the "low share prices of some global resource companies provide us with fresh opportunities".

The possibility of a Chinese state subsidy for overseas acquisitions may ring alarm bells in Western economies. Four years ago, CNOOC tried to buy an American oil company, Unocal, and succeeded in outbidding its main US rival. But the Chinese firm eventually withdrew its offer amid opposition from American Congressmen. They opposed the idea of a private US firm falling into the lap of a state-owned company, bankrolled by the Chinese Communist Party.

This time, China may calculate that Western governments are in a weaker position to object. They are, after all, spending billions on taking over their own companies, notably the banking sector.

Chinese leaders have now concluded a new raft of long-term oil supply deals. In the last week alone, Beijing has signed agreements worth more than £28 billion with countries as diverse as Russia, Venezuela and Brazil. Vice-President Xi Jinping last week toured major oil producers in Latin America.

He signed one agreement worth £7 billion with Petrobras in Brazil, and another to invest £5.6 billion in expanding Venezuela's oil production.

The latter deal aims to increase Venezuela's oil sales to China from 350,000 barrels a day to 1 million barrels by 2015. With his customary flourish, President Hugo Chavez went further, claiming: "All the oil China needs for the next 200 years - it's here. It's in Venezuela."

A separate deal with Russia will exchange £17 billion of Chinese loans to two major Russian companies - Rosneft, its biggest oil firm, and the pipeline operator Transneft - in return for for 15 million tons of oil ever year for the next two decades.

Hillary Clinton finished her visit to Asia, her first tour as US secretary of state, in Beijing yesterday. Her travels took in the world's two largest holders of American debt, Japan and China.

She called on Beijing to continue to buy American Treasury bills to fund President Barack Obama's stimulus package. "By continuing to support American Treasury instruments the Chinese are recognising our interconnection. We are truly going to rise or fall together," she said.

Mrs Clinton may be concerned by China's latest energy ties with Venezuela, a stridently anti-American country, and Russia, one of Washington's strategic competitors. But Dong Xiucheng, from the China University of Petroleum, said that Beijing's motives were solely commercial and there was no intention to strain relations with America.

"From the Chinese government's point of view, perhaps a third country's relations with USA are taken into consideration, but they will not be a big issue," she said.

Nation to boost gas production

February 18 (China Daily) -- In a move aimed at meeting rising domestic demand for oil and natural gas, China plans to boost production of these essential fuels by 4 percent and 58 percent, respectively, by 2011.

Crude oil output is expected to touch 198 million tons, while natural gas production will be 120 billion cu m in 2011, a three-year plan chalked out by the National Energy Administration has outlined.

Under the blueprint, China will build some large oil and gas production bases over the next three years. The country will stabilize the output from oil fields in northeast China and the Bohai Sea Bay area, while speeding development of fields in the Tarim, Junggar, Erdos and Sichuan basins.

As the world's second biggest oil consumer, China will work to increase its offshore oil and gas production.

By 2011, China will increase its total oil refining capacity to 440 million tons. Besides the construction of large refineries in Sichuan, Quanzhou, Guangzhou and Shanghai, China will push for joint-venture refinery projects with companies from Venezuela, Qatar and Russia.

The three-year plan has also covered many other areas, including the construction of oil and gas pipelines, development of clean fuel and financial support for the energy sector.

Energy industry needs more reform to pull through the difficulties of the economic chill worldwide, said Zhang Guobao, head of the NEA.

The global financial crisis has had a negative impact on China's economy and the country's energy sector is no exception, he said. "However, China's energy industry still has vast development potential as the huge population dictates demand."

Petrochemical stimulus plan to focus on refining and chemicals

February 18 (Xinhua) -- China's upcoming stimulus package for the petrochemical sector will likely focus on oil refining and chemical industries, while oil and gas exploration will not be touched upon, petrochemical experts said Tuesday.

The package will more likely dedicate to the overall development of the sector in the next three years with emphasis on industrial restructuring and optimization of product mix, said sources with China Petroleum and Chemical Industry Association (CPCIA), who declined to be named.

In terms of chemical industry, the stimulus package would stress adjustment and upgrading of industrial structure, support development of high-end chemical products, and encourage manufacturers to make high-tech and high-value-added products which could replace import ones, said the sources.

China's petrochemical industry has seen unbalanced development, according CPCIA report, citing facts such as the primary chemical manufacturing saw serious excess capacity, while high-end chemical production was relatively weak and relied largely on imports.

China's refining industry might extend its existing projects and build new ones, since China's current refining capacity might not be able to meet the demand of the country's development in the long term, said Dong Xiucheng, professor with China University of Petroleum.

The package might also include plans for establishing a reserve system for petrochemical products, such as fertilizer reserve during agricultural off-peak seasons and commercial reserves of refined oil, said sources with CPCIA.

China's petrochemical sector saw profit drop by 10 percent last year, totaling 499 billion yuan ($73.06 billion), said the CPCIA report.

China's refining capacity reached 342 million tons last year, and will increase 40 million tons in 2009, according to the Economic and Development Research Institute under China Petroleum and Chemical Corporation (Sinopec), China's largest oil refiner.

$13b gas supply line under way

February9 (China Daily) -- Construction of the eastern segment of China's second West-East gas line, which will supply more than 400 million people, was started in Shenzhen on Saturday.

The pipeline will cross 14 provinces and carry 30 billion cu m of natural gas every year from Turkmenistan and Xinjiang Uygur autonomous region to areas such as Zhejiang, Shanghai and Guangdong.

The 9,102 km network, tabled after completion of the first gas transfer project in 2004, will be made up of one trunk line and eight sub-lines. Work on the west segment began last year, with the line expected to be in use in 2011.

Vice-Premier Li Keqiang said when inspecting the construction in Shenzhen that the second project, the country's largest ever energy investment at 142 billion yuan ($20.8 billion), will play a significant role in achieving energy security, balanced regional development and closer relations between the mainland and Hong Kong.

The eastern part, from Zhongwei, Ningxia Hui autonomous region, to Shenzhen, will cost 93 billion yuan as it passes through many developed regions and difficult geographic areas, said Wu Hong, general manager of pipeline construction with China National Petroleum Corp (CNPC).

The western part, from Huoerguosi in Xinjiang to Zhongwei, will be finished this year.

Edward Yau Tang-wah, secretary for the environment in Hong Kong, was quoted in the Nanfang Daily as saying on Saturday that the pipeline will supply 1 billion cu m of natural gas annually for 20 years.

The project will also be vital to China's bid to raise domestic demand as it will stimulate investments of more than 300 billion yuan in steel, construction, machinery and in natural gas utilization sectors, Xinhua said, without giving sources.

Ma Jian, an official with Ningxia development and reform commission, said the autonomous region will invest more than 10 billion yuan on 560 km of pipelines and that the collateral investment could reach 30 to 40 billion yuan.

Wu, of the CNPC, also said the project will significantly raise the nation's usage of clean energy and cut pollution.

CNPC lines up five new oil, gas projects

December 23 (China Daily) -- China National Petroleum Corporation (CNPC) yesterday said it had approved five new projects, which include oil and gas pipelines, oil refinery and chemical production.

The new projects involving huge investments were approved at a company conference on Dec 19, CNPC said on its website yesterday. It did not disclose any further details on the five projects.

The company also approved its 2009-20 plan for oil pipelines, it said.

CNPC spokesmen yesterday declined to comment on the five projects and the oil pipeline plan, but said the second West-East natural gas pipeline, which is under construction currently, is not included in the five projects.

Industry insiders said the five projects could include an oil refinery in Chengdu, Sichuan province and an oil and gas pipeline linking Yunnan province and Myanmar.

The Chengdu plant, located in Pengzhou, will have an oil refining capacity of 10 million tons per year and ethylene production capacity of 800,000 tons per year.

The investment in this project is expected to be around 10 billion yuan.

The project, which is so far the largest industrial project in Sichuan, has got the approval from the National Development and Reform Commission (NDRC) this year.

The NDRC said in November that in line with the government's policy to boost domestic demand, construction of the project is expected to start within this year.

According to the Yunnan provincial government, construction of the Yunnan-Myanmar gas pipeline is expected to start in the first half of 2009. It is one of a series of large energy and infrastructure projects Yunnan will embark on in 2009.

Earlier media reports said the project also included a $1.5 billion oil pipeline and $1.04 billion gas line. The project is expected to provide an alternative route for China's crude imports from the Middle East and Africa and ease the country's worries of its over-dependence on energy transportation through the Strait of Malacca.

CNPC General Manager Jiang Jiemin earlier said the company's investment in 2009 will focus on finding more oil and gas resources.

The company may have to adjust its investment structure due to the financial crisis, but will, however, continue to strengthen its core oil and gas business, said Jiang.

China signs $25b crude deal with Russia

February 18 (Agencies) -- Beijing signed a deal with Moscow Tuesday to lend $25 billion to two Russian oil firms, which in turn will sell 15 million tons of crude oil a year to China for the next 20 years.

The agreement will ensure the long-awaited extension of Russia's Siberia-Pacific coast pipeline to China, too. The pipeline project, agreed on late last year, will see the extension of the pipeline from the Siberian city of Skovorodino, 70 km north of the Sino-Russian border, to China.

China will lend $15 billion to Russia's state-owned oil firm Rosneft and $10 billion to pipeline monopoly Transneft. China Development Bank (CDB) provided the credit for the deal, according to the Associated Press (AP).

The Russian firms, on the other hand, will ensure China gets 300,000 barrels of crude a day for 20 years.

China and Russia signed seven agreements on energy cooperation package programs, Xinhua said, quoting a Foreign Ministry official.

The $25-billion deal is seen as a boost to Russian energy firms because the global financial crisis and a drastic drop in the crude prices have left them struggling to raise capital, AP said.

The agreement was signed by Vice-Premier Wang Qishan and Russian Deputy Prime Minister Igor Sechin in Beijing at the third round of energy talks between the two countries.

"We hope the two sides will give full play to the bilateral energy negotiation mechanism to promote bilateral energy cooperation," Wang told Sechin.

Sechin replied that the two countries should intensify cooperation in fields such as energy and finance, and make joint efforts to guarantee that the agreed projects are implemented on time.

Sechin also met Premier Wen Jiabao Tuesday.

A memorandum of cooperation in the energy sector signed in Moscow in October said Transneft and Rosneft could get loans from China in exchange for long-term oil sales to Beijing. But the talks were suspended on November 12 because of divergence of views on lending rates and loan guarantees, industry insiders said.

Russia, the largest oil exporter after Saudi Arabia, is seeking to shift its exports focus from the West, and eyeing China as the main new market. Last year, trade between Russia and China increased 18 percent to $56.8 billion.

And Premier Wen placed cooperation in resources development on top of his five proposals on economic cooperation when he visited Russia last year.

The two countries have agreed to work jointly in oil production and processing, natural gas production and in chemical industries. They have agreed to expand cooperation in nuclear energy, too, including the construction of nuclear power plant in Tianwan, Jiangsu province, uranium mining, and post-processing of spent fuel.

Climate Change and Air Pollution

US-China co-op urged on climate change

February 10 (Xinhua) -- WASHINGTON -- Experts from the US Asia Society Center on US-China Relations and the Pew Center on Global Climate Change on Monday urged the Obama administration to take immediate action to create a new, groundbreaking collaboration with China to address the urgent issue of climate change.

"Closer cooperation with China should be a high priority in a US climate strategy," said Eileen Claussen, president of the Pew Center on Global Climate Change, at a press conference that was held for the release of the report Common Challenge, Collaborative Response.

In the report, produced by the Initiative for US-China Cooperation on Energy and Climate Task Force, over 50 of the world 's leading scientists, China experts, political and business leaders provide the Obama administration with a new policy roadmap for immediate action with China.

This report presents both a vision and a concrete roadmap for a new collaboration that could turn the US and China into global leaders on the climate change challenge, while simultaneously helping to transform this most critical of all bilateral relationships in the world into one which is under-girded by cooperation on this crucial common interest.

"Working together, the United States and China can advance key technologies and provide a stronger foundation for an effective global climate effort," said Claussen. "An effective global response to climate change is possible only with the full engagement and leadership of the United States and China."

"With a new presidential administration in the US and an increasing awareness of the dangers of global warming among Chinese leaders, our two countries are presented with an unparalleled opportunity to form a new strategic partnership aimed at averting catastrophic climate change," said Schell, Arthur Ross Director of the Center on US-China Relations. He thought that without the active participation of the United States and China, efforts by other nations are bound to fall short of being able to halt climate change.

The report maintains that US-China collaboration can help catalyze a new strategic transformation to a global, low-carbon economy that will be more sustainable while reducing greenhouse gas emissions. At the same time, such close and sustained collaboration between the United States and China will build a stronger foundation for future Sino-American cooperation on other strategic challenges facing both nations in the 21st century.

The report recommends the leaders of the two countries convene a summit to launch a new US-China Partnership on Energy and Climate Change. The presidential summit should outline a major plan of joint action and empower relevant officials in each country to take necessary actions to ensure its implementation.

The experts also showed optimism for the future of the US-China cooperation on energy and climate change, since US President Barack Obama has pledged to reverse the resistance of his predecessor George W. Bush to action on climate change.

On January 26, Obama told the US Environmental Protection Agency (EPA) to reconsider immediately a request by California to impose its own strict limits on vehicle carbon dioxide emissions, blamed for contributing to global warming. Democratic EPA Administrator Lisa Jackson said Obama's move signaled a "sea change" in US action on climate change.

On the same day, US Secretary of State Hillary Clinton named Todd Stern, a former White House assistant who was the chief US negotiator at the Kyoto Protocol talks in President Bill Clinton's administration, as the special envoy for climate change.

Stern's appointment sends "an unequivocal message that the United States will be energetic, focused, strategic and serious about addressing global climate change and the corollary issue of clean energy," Clinton said.

British ambassador: climate change action compatible with economic recovery

February 8 (Xinhua) -- BEIJING -- Britain's ambassador to China said Friday that "tackling climate change is compatible with economic recovery".

The ambassador's comments come in the wake of a meeting earlier this week in London between Chinese Premier Wen Jiabao and British Prime Minister Gordon Brown, at which they discussed environmental issues and plans for economic recovery.

Britain's ambassador William Ehrman wrote in an article entitled 'Why tackling climate change is an economic opportunity': "The perceived conflict between protecting economic growth (and jobs) and protecting the environment is being revealed as false."

"Through high-level meetings like the one that took place in London this week, and through the political statements emerging in the US, Europe, China and elsewhere, we are seeing the beginnings of an important shift, " said Ehrman, "We are learning that tackling climate change is not merely compatible with economic recovery: it can actually help to unlock incentives for investment that will accelerate a global recovery and ease our dependence on oil."

According to Ehrman, when Premier Wen and Prime Minister Brown met in London, they agreed on the importance of openness to free trade and co-ordinated macroeconomic policy responses to stimulate recovery, and used the occasion to reaffirm their commitment to tackling climate change through low carbon development in spite of the economic downturn. "And that too is significant." Ehrman said.

"Tackling climate change will require leadership from all major countries in the world, but those countries that move first will be best placed to take full advantage of tomorrow's global economy. Many have already begun to respond."

"President Obama's Green Jobs package sets out new policies to put the USA. on a low carbon path; the EU has already set ambitious targets to reduce our emissions by 60 percent by 2050, with the U.K. committing to do more."

"China too is taking a lead by announcing far reaching reforms to energy pricing policy as well as the inclusion of new money to promote energy efficiency in the fiscal stimulus package, " stressed Ehrman in the article.

"Through all these interventions, the form of a sustainable, resilient recovery is becoming clear and its shape is low carbon, with an emphasis on major investment in energy efficiency, a fundamental shift towards renewables and nuclear power, a re-engineering of electricity grids to enable dynamic demand and supply, accelerated roll out of low carbon transport, increased research and development into new energy technologies, and up-graded investment in apprenticeships and science and engineering training programmes to ensure we have the skilled workforce that the low carbon economy will need," said Ehrman.

"Though a good beginning, these are just first steps," said Ehrman, the most recent scientific evidence presented a worsening picture of the sensitivity of the global climate to carbon emissions.

"In order to avert disaster we must, each one of us, redouble our effort," Ehrman stressed, "the U.K. will continue to work with China to achieve this and I am confident that through the collective action of governments, business, and of societies across the world, we can address this challenge."

Wen: China all out to tackle climate change

February 2 (Xinhua) -- LONDON -- China gives top priority to meeting the challenge of climate change, Chinese Premier Wen Jiabao told the Financial Times on Sunday.

Wen said the Chinese government supports all measures that are playing roles in meeting the challenges of climate change and the development of a green economy.

"We are of the view that to develop a green economy is probably another area in the economy as we meet the international financial crisis," Wen said.

The Chinese premier said China has established a national leadership group to tackle climate change and "I'm head of the group."

China has formulated a national program on coping with climate change, and not only is it the first program of its kind for China, it is also the first of its kind among all developing countries, Wen said.

In the 11th five-year plan, China has set targets to annually reduce the per unit GDP energy consumption by 4 percent and in total by 20 percent in five years.

"We will continue to make efforts on this front and set targets for ourselves," Wen said. "I think this can be seen as a way that China is holding itself accountable to the relevant targets."

When asked whether China is ready to sign a treaty at the upcoming Copenhagen conference to cap carbon emissions, the premier said he had a thorough discussion on the issue with European Commission President Jose Manuel Barroso in Brussels the day before yesterday.

It's difficult for China to take quantified emission reduction quotas at the summit, because the country is still at an early stage of development, Wen said, Europe started its industrialization several hundred years ago, but for China, it has only been dozens of years.

"China has a 1.3 billion population, and in terms of per capita greenhouse gas emission, we are certainly not the biggest one, yet we are still very active and positive about our cooperation with Europe in terms of saving energy, reducing pollution, developing a low carbon economy and developing those environmentally friendly technologies," Wen said.

Are we carbon accountable?

February 23 (China Daily) -- In recent weeks several key events have taken, or will be taking place, regarding the fight to tackle climate change and pollution.

The first was convened on Wednesday at the Cheung Kong Graduate School of Business in Beijing, a seminar presented by Frank Joshua, a leading figure in global climate change and carbon trading. This night he revealed that in only 4 years the trade in carbon credits had hit US$125 billion by 2008, heralding the fastest explosion of any commodity market in history!

His parting remark, lapped up by the young entrepreneurs on hand, sitting next to an already well-heeled ambassadorial delegation of varying nationalities, was that if you had some cash to splurge in this time of tight credit, you may well consider contemplating putting some of that into the current carbon trade market, particularly that which is emerging here in China.

With almost 3 decades of experience in this virtual silent growth industry, Joshua's journey through the origins of carbon credit trading, its current status and its future prospects was a fitting prelude to Hillary's visit over the weekend - our next significant climate/carbon event.

Nevertheless, this tidal wave of activity that's galvanizing the world's scientists, economists and political leaders is being met by a surprising disinterest from the general public. Highlighting our collective ignorance Joshua asked the crowd, "How many of you have actually held and read the Kyoto Protocol?"

The response was bizarre - like a methane emission permeating across the floor. This odor - a mist of guilt - that swept through the audience, through members who take their health, and wealth, seriously, but on this occasion, whose dissonance and ignorance was undeniable - and in public.

He'd shamed us and made us carbon accountable and his job has just begun. Now's the time to take this knowledge and start feeding it to the masses. This science and economy, this market and its policies, with its assorted array of baffling acronyms, is at times so disconcerting its no wonder noone is interested. How to make climate change sexy?

Like learning Chinese, with its various tones and script, one needs to acquire a sense for CDMs, Clean Development Mechanisms, CER's Carbon Emissions Reductions and GHG, Greenhouse Gases.

This done, we then need to proceed and improve our geography and understand what each place represents in terms of climate policy - becoming familiar with locations like Rio, Kyoto, Marrakesh, Potsdam, Bali, and Copenhagen.

Fortunately with US Secretary of State Hillary Clinton just departing where she ear-marked her administration's intent for jointly tackling global warming in partnership with China– the countdown to Denmark in December just got that more climatic.

Such tension no doubt critical, for as Joshua noted, it was the previous Bush administration's lack of interest in this field, and other miscreant governments like Australia's, that compelled the Europeans to take the baton, to the extent that they now dominate the field.

Their governments have also proven responsive and more importantly, the private sector has stepped up to the challenge, through corporate social responsibility and the quest to be carbon neutral.

The beauty of this evolution, where a market mechanism has been able to leverage large sums of capital to mitigate global warming via reductions in carbon emissions, is incredibly timely and unprecedented. Though leadership and consistency remain essential if we are to move to the next stage and continue to make policy that is workable for the developing world.

Clinton speaking of clean energy at the General Electrics Taiyanggong Thermal Power Plant over the weekend herself generated hope, purpose and direction. At the same time Obama in Canada was mentioning to counterpart Harper the need for a clean energy dialogue away from Alberta oil sands and American coal.

Another key event, mentioned last week in a post for the Atlantic Monthly's by James Fallows titled, "The US, China, and saving the world", was the release of a report, titled, "A road map for US China Cooperation on Energy and Climate Change," and within this a blueprint and set of recommendations for both governments and industry to work towards.

Of note from that report's executive summary one reads, how this engagement may help to minimize security tensions which ultimately, may then also free up funds to invest further in cleaner energy creation and the de-carbonization of heavy polluting sectors like steel and cement.

In this light, and onto our final key event for this article, comes China's largest Carbon Conference, Carbon Trade China 2009, running from April 21-23, here in Beijing. Expecting to attract a huge field, it promises to facilitate "deep communication between buyers and sellers".

For an industry still in its infancy, though already so financially, and environmentally, rewarding, now may be the time to be making ourselves more carbon accountable.

Facing up to climate change

February 16 (China Daily) -- China's worst drought since 1951, which is taking its toll on agricultural production in eight provinces, is raising awareness across the nation of the long-terms risks posed by climate change.

The Chinese government announced a severe drought emergency in Hebei, Shanxi, Anhui, Jiangsu, Henan, Shandong, Shaanxi and Gansu provinces on Feb 5.

As of Feb 9, 18.4 million hectares of farmland and 9.1 million hectares of cropland had been hit by the drought, which had left 3.46 million people and 1.66 million livestock short of drinking water.

Lin Erda, a member of China's national climate change expert panel and a senior researcher with the Chinese Academy of Agricultural Sciences, said that temperatures in some regions of southern, northern, and southwestern

China had approached the upper limit which is suitable for crop growth.

Because global warming has accelerated the growth of crops and shortened their period of maturity, there is not enough time for grains to ripen, which could cause a decline in output, Lin warned.

Over the past two decades global warming has led to a rise in the amount of farmland affected by droughts and greater fluctuations in crop output, Lin added.

In recent years, around 22 million hectares of farmland have by been hit by droughts annually, leading to the loss of 10 million tons of grain annually. The most serious loss happened in 2000 and 2001, with China's crop yields falling by 50 million tons each year.

The National Assessment Report on Climate Change, which was published in 2007, points out that climate change will continue to have a significant impact on China's environment and economy, especially on agriculture, animal husbandry and water supply, with some of this proving to be irreversible.

It says that the country's average temperature increased 0.5 to 0.8 C over the past century, while the national average temperature is likely to rise 2 to 3 C in the coming 50 to 80 years as climate change will accelerate.

According to the report, in the coming five to eight decades, the country's average precipitation will increase 7 to 10 percent, however, it is impossible to change the trend of drought across the country, especially in northern China.

It says global warming will reduce the streamflow of rivers in northern China while river streamflow in southern China will increase. However, the annual evaporation capacity will also rise. As a result, the frequency of droughts and floods will rise while water supplies will come under intense pressure.

The annual water shortage in western China is expected to reach 20 billion cu m between 2010 and 2030.

If no measures are taken to tackle this situation, the output of China's basic crops, such as wheat, rice and corn, would fall by 37 percent at the most.

The report predicts that the country's agricultural production would be seriously affected by climate change, while its long-term food security would be threatened without any action.

Besides, global warming will increase farmers' demand for water, making agriculture a costlier business.

A project jointly undertaken by the Chinese and British governments, Impacts of Climate Change on Chinese Agriculture (ICCCA), warns that climate change will present a major challenge to China in feeding its growing population by the middle of the century.

The study points to an increase in the intensity and frequency of crop diseases and pests. With the warmer climate, some diseases and pests now find it easier to survive the season, and cause problems especially in the spring and autumn.

In addition, climate change is expected to result in more extreme and frequent droughts.

The study echoed the National Climate Change Review Report, and predicts that China is likely to see a reduction in yields of key crops - wheat, maize, and rice - from the 2020s.

The study also shows that increased levels of carbon dioxide in the air, which helps plants to grow and, improvements in farming techniques may help boost yields, but whether this can significantly reduce the effects of climate change is very uncertain.

Lin said that the best way to minimize the impact of climate change is "to adjust measures to local conditions, to modify the agricultural structure based on our forecast of changes in the climate".

"Depending on our scientific research and forecast, we should grow optimum crops at most suitable place at an opportune time, while also strengthening management and making improvements to agricultural infrastructure," he said.

Water, air pollution in China still serious

February 24 (Xinhua) -- SHANGHAI -- Lakes, rivers and the air in many places in China are still polluted, some seriously, in spite of continuous efforts to control pollution, a Chinese environmental official said Tuesday.

Zhang Lijun, deputy minister of environmental protection, said environmental protection departments across the country should press enterprises harder on pollution control.

"The general situation of environmental pollution does not allow us to be optimistic," Zhang told a national meeting on pollution control in Shanghai.

"The fundamental way to overcome this is to continue to press enterprises to reduce pollution emission through technology and management," he said.

For monitoring particulate matter and sulfur dioxide as major air pollutants, the China Environmental Monitoring Center classifies air quality in urban areas into five levels, ranging from level I or excellent, level III or slightly polluted, to level V or hazardous.

A national report on China's environment, issued by the ministry on November last year, said among some 320 cities of prefecture level and above, air quality of 39.5 percent of the cities averaged at level III or lower.

China also classifies water quality in major rivers and lakes into six levels, ranging from level I, which is good enough to be used as the source of drinking water, to level VI which is too polluted to be used even for farm irrigation.

The quality of the water sampled in almost one fourth of the monitoring stations set up along major rivers such as the Yangtze River and the Yellow River averaged at level VI, according to the document.

Pollution in 28 major lakes, such as the Taihu Lake and the Dianchi Lake, remained serious, with the quality of almost 40 percent of the water was at level VI.

Waters in urban regions were also facing serious pollution, with 90 percent of river water and half of underground water polluted.

Zhang Lijun said China invested 51 billion yuan (US$7.46 billion) by September last year into 2,712 water treatment projects, 881 of which are now operational.

These projects, scattered along five rivers, two lakes, and in reservoir areas of the Three Gorges Dam on the Yangtze River, aim to reduce the emission of chemical oxygen demand (COD), a measure for water pollution, into the water.

Guangdong pollution level falls

February 12 (China Daily) - Emissions of sulfur dioxide and chemical oxygen demand (COD), two major indicators of pollution, fell 5.6 percent and 5.3 percent respectively last year in Guangdong, the provincial environmental regulator said yesterday.

Due to the province's intensified efforts in recent years to reduce pollution, sulfur dioxide and COD emissions dropped to 67,100 tons and 53,700 tons last year, the Guangdong environmental protection bureau said.

"It's all thanks to the province's efforts to cut pollution in major industrial projects and relocate a number of big energy-consuming plants," said Zhou Yongzhang, director of the environment research center of Sun Yat-sen University in the city.

In recent years, several big industrial plants, particularly those situated along the banks of the Pearl River, have been relocated, he said.

With the reduction, Guangdong has achieved its target set last year to cut COD and sulfur dioxide discharges by 4.5 percent and 5 percent, the bureau said.

A typical indicator used to measure water pollution, COD is defined as the quantity of oxygen required to decompose all organic matter, while sulfur dioxide is one of the major air pollutants.

In 2006, nine provinces and regions had signed a commitment with the country's top environmental watchdog to reduce water pollution by 10 percent by 2010.

Under the commitment, Guangdong province was required to reduce its COD emission to 940,000 tons by 2010, a 12 percent reduction from 2005.

"The rather huge drop in emissions of sulfur dioxide and COD is of great significance to the province's economic development," Zhou said.

"As the largest province in terms of GDP in the country, Guangdong will most likely see environment-friendly economic development, thanks to the intensified efforts to curb pollution," he said.

Days when the air is filled with dust and haze dropped by 16 to 53 percent in most Pearl River Delta cities in the province, Li Qing, director of the Guangdong provincial environmental protection bureau, said.

Guangdong has also become the first province in the country to develop a daily sewage treatment capacity of more than 10 million tons, the bureau said.