



The Auto Project on Energy and Climate Change  
汽车能源与气候变化—中国项目

# MONTHLY NEWS BRIEFING

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## General Energy Issues

### Would energy taxation blunt Asia-Pacific competitiveness?

July 18 (China Daily) -- Bangkok last month hosted the most important annual environmental technology trade fair in Asia-Pacific. About 10,000 people visited Entech Pollutec/Renewable Energy Asia 2007. More than 300 green business exhibitors from the private sector were on hand.

The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) was also there. It brought together government policy makers, business executives and consumer rights groups in the Third Green Growth Policy Dialogue. "Renewable Energy: Technology, Markets and Policies in Southeast Asia" was a special focus of the dialogue.

With the sustained high oil prices and climate change threatening the global economy, energy taxation could be an important instrument for promoting renewable energy without undermining the competitiveness of Asia-Pacific economies. On the surface, that may seem to fly in the face of conventional economic theory. But the energy taxation we are referring to is not about a new, additional tax burden. Rather, it is about a shift of the tax base - from income to pollution.

Green tax reform is one of five tracks of the Green Growth approach initiated by UNESCAP and endorsed by its 62 member governments. Building sustainable infrastructure, encouraging sustainable consumption patterns and promoting the greening of business are the other broad measures promoted by the Green Growth approach.

Currently, growth is measured in terms of "economic efficiency" or market prices that do not reflect ecological costs. The Green Growth approach stresses "ecological efficiency" - to maximize resource efficiency and minimize the impact of pollution.

Green tax reform changes the tax base from income to pollution, so that market prices may properly reflect ecological costs.

But does a green tax work? The experience of Europe shows that it does. Green taxes aimed at promoting energy conservation and reducing carbon dioxide (CO<sub>2</sub>) emissions have been in place in Western Europe since the early 1990s and have been increased progressively. Germany increased its energy tax by 55 percent over a span of just five years between 1999 and 2003. Energy taxes now account for about three quarters of environmental tax revenue in the European Union.

The main objective of taxes is of course to generate revenue for public spending. In a revenue-neutral situation, green tax reforms bring a double dividend - reducing income taxes without cutting public spending. In the German experience, citizens dissatisfied with high pension insurance contributions are delighted that additional tax revenues collected from polluters have significantly offset their pension burden.

But how about the green bit of the tax? In Sweden, it is estimated that 60 percent of the reduction in CO<sub>2</sub> emissions between 1987 and 1994 resulted from the energy tax. A study by the National Environmental Research Institute, at Denmark's University of Aarhus, found that green taxes in six EU countries have contributed to better economic growth, competitiveness and employment.

In comparison, the Asia-Pacific region still has a long way to go. Some countries, such as China, Japan and the Republic of Korea, have made modest inroads towards shifting taxes from income to carbon-generating activities. Some parliamentarians in Japan have been pushing in the last few years for a bill on an environmental consumption tax, against fierce opposition from industrial interest groups. In the Republic of Korea, the petroleum excise tax has been raised at a rate of 30.9 percent per year since 2000. China is now considering a 20 percent to 50 percent tax on retail gasoline and diesel prices to promote energy conservation.

At the environmental technology trade fair in Bangkok, companies vied with each other to showcase technology allowing for cleaner energy and production. To reduce pollution and emissions and to counter climate change, technology no doubt has an important role to play.

However, it is clear from the European experience that a concerted effort to reform taxation is also crucial to achieve sustainable energy production and consumption. It is possible that energy taxes linked to a reduction in income taxes - being revenue neutral - could reduce consumption and pollution without negatively affecting industrial competitiveness.

In fact, such tax reform would spur further innovation in environmental technology. As we declare war on global warming, we should deploy both the fiscal and physical weaponry that is at our disposal.

The author is United Nations under-secretary general and executive secretary of the UN Economic and Social Commission for Asia and the Pacific (UNESCAP)

### **Report: China says energy efficiency slowly improving**

July 31 (AP) -- The energy efficiency of China's sizzling economy is improving but the country - the world's No. 2 oil consumer - is still struggling to meet self-imposed conservation targets.

China launched a five-year campaign in 2006 to cut energy use per unit of economic output 20 percent by 2010 amid worries about pollution and rising dependence on imported oil.

Total energy consumption per unit of economic output fell 2.78 percent in the first half of the year from the year-earlier period, the Xinhua News Agency said, citing a government report. But it said electric power used per unit of output rose 3.64 percent.

Chinese industries use 20 to 100 percent more energy per unit of output than their US, Japanese and other counterparts, according to the World Bank. China's government says the gap is even bigger, putting energy use at 3.4 times the world average.

Improving efficiency is a key part of efforts to reduce the ecological cost of China's 28-year-old boom, which has left it with some of the world's most polluted air and water supplies.

Last year, energy consumption per unit of output fell just 1.33 percent, far short of the 4 percent annual target.

Total energy use is soaring, despite the improved efficiency, in a boom that saw China's economy grow by 11.9 percent last quarter, its fastest quarterly rate since 1995.

Oil imports, for example, rose 11.2 percent in the first half of the year.

Some industries reported big gains in efficiency, Xinhua said, citing the joint report by the National Bureau of Statistics, the cabinet's National Development and Reform Commission and another cabinet body, the Office of the National Energy Leading Group.

Energy consumption per unit of output fell 7.76 percent in the coal industry over the year-earlier period, the report said. Construction materials producers showed a 7.84 percent gain and chemical companies a 5.17 percent improvement.

Improvements in some areas were smaller than the national average - 2.57 percent for electric power utilities and just 1.27 percent for oil and petrochemical companies.

The government is pressing local utilities to shut down older power plants and factories to install more efficient technology.

### **China to boost forest-based bioenergy: official**

July 17 (XinHua) -- China would build 13.33 million hectares of forests by 2020 to produce bio-diesel oil and fuels for power generation, said Jia Zhibang, Director of the State Forestry Administration on Tuesday.

Jia said the lipid- and starch-rich materials from the forests could be processed into liquid to make bio-diesel oil and ethanol fuel and some woods could be cut into small cubes for the power generation.

The country plans to produce more than six million tons of bio-diesel oil with materials from the forests and increase the installed capacity of

power generation by more than 15 million kilowatts by 2020, Jia said.

"We foresees a bright future for the forest-based bioenergy," Jia said.

He said the potential of the country's forest-based bioenergy would be equivalent to 200 million tons of coal, the utilization of which would reduce the consumption of fossil energy by 10 percent.

There are more than four million hectares of oil plants nationwide, and 154 kinds of trees could produce seeds containing more than 40 percent of oil, with total production of the seeds totaling five million tons.

Another 57 million hectares of waste land are available and suitable for planting trees for the production of forest-based bioenergy, according to Jia.

Jia also said the administration would develop the forest-based bioenergy together with the China National Petroleum Corporation, the country's grain importer and exporter COFCO and the State Grid Corporation of China.

### **China falling short on energy-saving goals**

July 12 (AP) -- China is falling short of its goals in a campaign to boost energy efficiency in its fuel-guzzling economy \_ the world's No. 2 oil consumer \_ but is starting to make progress, the government said Thursday.

China launched a five-year effort in 2006 to cut energy use per unit of economic output by 20 percent amid mounting worries about pollution and dependence on imported oil, which leaders see as a strategic weakness.

But last year's reduction was only 1.33 percent, well below the 4 percent annual target from China's 28-year-old economic boom, which has left its cities choking on some of the world's worst air pollution and millions of people without clean water.

"Cutting energy consumption and pollutant emissions and dealing with climate change are urgent, critically important tasks," Premier Wen Jiabao said at a government meeting this week, according to state media.

China's oil imports rose 11.2 percent in the first half of this year to 570 million barrels, the government reported this week.

Beijing has unveiled a series of initiatives to encourage rebates of value-added taxes on exports of cement, plastics and other goods deemed energy-intensive or polluting. Last week, the government said companies that exceed pollution limits will be barred from receiving bank loans. Construction companies have been ordered to make new buildings more energy-efficient.

But China will have trouble meeting its goals while energy-intensive manufacturing still accounts for more than half its economic output and it needs high growth to reduce poverty, said Ting Lu, a Merrill Lynch economist in Hong Kong.

"China is not making good progress on this. The 20 percent target is good, but of course it's very hard to achieve that in five years," Lu said. "It's not a wealthy country."

Total energy consumption rose by 9.6 percent last year, the first time in three years it has climbed more slowly than the rate of economic expansion, Xie said. Revised figures issued by his agency this week put 2006 economic growth at 11.1 percent.

The government still needs to alter some pricing guidelines and regulations to bring them into line with energy-saving goals, Xie said, though he declined to give details.

The efficiency plan calls for China to reduce energy use from the equivalent of 1.22 tons of coal per 10,000 yuan (US\$1,300; euro1,000) of economic output in 2006 to 0.98 tons in 2010.

Among China's 30 provinces and regions, only the city of Beijing met its efficiency goal last year, cutting energy use per unit of output by 5.25 percent, according to Xie. He said at least 1 percent.

Xie said his agency had yet to compile figures for the first half of this year. But based on data from January to May, he said, "the situation should be much better than last year."

## Accountability system

July 31 (China Daily) -- It is of vital importance to the future of China to hold local government officials really accountable for energy saving and environmental protection.

An accountability mechanism under consideration by the central government as revealed by a senior official will hopefully make it imperative that government leaders or Party secretaries at any level will have no chance of being promoted as long as their governments fail to fulfill the targets of energy saving and reduction in discharge of major pollutants.

The country failed to achieve the target of saving 10 percent of energy for every 10,000 yuan GDP and reducing 10 percent of major pollutant discharge in the 10th Five-Year-Plan (2001-05). The 11th Five-Year-Plan (2006-10) sets both targets at 20 percent. However, we failed to fulfill both quotas of 4 percent in 2006, and both quotas rose in the first six months of this year rather than dropped.

The ominous sign is that energy-consuming, resource-intensive and highly polluting industries contributed 60 percent of the GDP growth in 2006 and the same was true of the growth in the first six month this year.

There is no denying that local governments have failed to place enough emphasis on the restructuring of their economy for energy-saving and reining in the discharge of major pollutants. Over-emphasis of GDP growth still dominates the agenda of local economic development.

The new accountability mechanism should be one of the options to thrust down the throats of local government leaders that efficient use of energy and resources and pollution control are vital to the sustainability of the country's development.

It is not easy to reverse the over-emphasis on GDP growth by local government officials as GDP growth means an increase in revenue or more money at the disposal of local governments. While energy saving and pollutant discharge reduction requires input in technology upgrading, which could even slow down GDP growth.

So such a mechanism must be designed that it is feasible and can really push local government officials to have a vision beyond their immediate interests.

The statistics department and auditing office must be vigilant against local governments providing false figures of the targets, which will affect the smooth implementation of this mechanism.

## Food vs fuel wars just beginning

July 6 (China Daily) -- As everyone in China knows, food prices have risen sharply over the past year. If it gives any comfort to anyone, China is not the only country. Rising food prices are a worldwide phenomenon.

The story goes back to the days after World War II. The Western industrial nations went about developing their economy at a fast pace. The basis for this development was cheap oil. From 1945 all the way to the present day, cheap oil seemed to be a bonanza with no end in sight.

As a consequence of cheap oil, the society that developed was based on the internal combustion engine - the motor car. Even though some Americans have been aware of oil running out sometime in the future, the country still consumes oil as if the supply will last forever.

In the US, transport is based on the individual automobile rather than public transport like subways, trains. Even freight is carried by large trucks instead of trains.

Petroleum is fundamental to our modern life. From oil we make plastics, fertilizers, medicine and chemicals. We burn oil to produce electricity.

When countries like China and India began to industrialize, the global scene changed because of increasing demand for oil.

In 2005, easily extracted oil from the oilfields peaked. From now on, the flow will be at a reduced rate, eventually running dry. Oil extracted from the more difficult oilfields, requiring more technology and consequently more expense, is expected to peak in four years, according to some experts in the United Kingdom. Since the global demand for oil exceeds supply, oil prices are going to continue rising.

In the US, there is growing awareness that the country should not depend on foreign oil from unstable regions like the Middle East. More importantly investors have realized there is profit to be made by converting corn into ethanol which can be used as motor fuel.

As more and more ethanol production distilleries come on line, 30 percent of the US corn harvest next year will go into ethanol production.

The US is the world's biggest grain producer and exporter. Almost 70 percent of all the grain imported by many nations around the world comes from the US.

As well as providing food for humans, corn is used as feed for livestock - chickens, cows, pigs. So, as the US turns corn into ethanol, the world community experiences a food shortage. The result is higher prices for foods such as meat, milk, eggs and ice cream.

This inflation initially hit countries like China, India, Mexico and the US, containing 40 percent of the world's population. In China, compared with last year, January pork prices were up 20 percent, eggs up 16 percent. Food prices rose 3 to 4 percent just in the month of May compared with the corresponding period last year.

In India, food prices are now 10 percent higher than last year. In the US, the forecast for 2007 is that the price of chicken will rise 10 percent, eggs 21 percent, and milk 14 percent.

It should be noted that if the entire US corn crop were converted into ethanol, it would satisfy only 16 percent of US transport needs. The amount of corn that goes into the gas tank of a large automobile could feed one person for a year.

So there is direct competition between the 800 million people who own automobiles and the world's poorest 2 billion. Basically there is now a link between the food industry and the energy industry.

When the market sees that it is more profitable to produce ethanol than sell the grain for food, the food industry will be in trouble. Since ethanol is used as a fuel, its price will be tied to the price of oil. As oil prices climb because of the impending world shortage of oil, ethanol prices will rise. As a consequence food prices will rise as well.

China also has an ethanol industry. It was basically started by Western investors who sought to profit by China's corn and the relatively cheap labor as the global price of oil climbs. The Chinese government has been quick to recognize the danger of diverting corn into ethanol. It has said that in view of the food shortage, ethanol production has no place in the Chinese economy.

How should governments proceed in what is a free market economy? The chief remedy is to reduce government subsidies to the ethanol industry. This seems difficult in the US Congress because of vested interests such as farmers who grow corn.

We are already seeing urban protests in countries such as Indonesia, Egypt, Algeria, Nigeria and Mexico. In Mexico, 75,000 people have taken to the streets forcing the government to initiate price controls on corn-based tortillas, their staple food.

It does not take a leap of imagination to see that continuing down the path of corn for fuel will lead to worldwide famine affecting billions of people. This will certainly lead to political instability, social unrest and general chaos.

The picture is not complete if we do not mention another major reason for the global rise in food prices. That is the fast growth of the world population.

More people means more mouths to feed. It is obvious that when the growth of population outstrips the capacity of the world to produce food, famine is the inevitable result.

We have to give every incentive to reduce the world's population right now. The world's population presently stands at 6.5 billion. It is projected to grow to 8.2 billion by 2030 and 9 billion in 2050.

How are we going to feed these additional people when there is already hunger in the world?

This is the most urgent problem humanity has yet faced. Unless we solve this problem, all the other problems such as global warming, water shortages, oil running out will become irrelevant.

There are two important questions at issue here. The first is a moral question: Should we deprive

many less developed countries of food just so that we in the industrial countries in the West can have our pleasure rides? Second, a much more important question is: Can the world afford the destabilization - economic, political and social - that is sure to follow from a starving populace?

The author is advisor and senior fellow at the American Center for International Policy Studies

### **Nearly half of electricity from renewable resources by 2030: Berlin**

July 6 (AP) -- Germany plans to boost the percentage of electricity generated by renewable resources to 45 percent by 2030 in a bid to curb global warming, environment Minister Sigmar Gabriel said Thursday.

Gabriel told reporters that a progress report on a renewable energy law (EEG) passed in 2000 showed that the country had already surpassed the quota of 12.5 percent set for 2010.

He said Berlin was now setting a more ambitious target to produce at least 20 percent of electricity used in the country with renewable resources such as wind and solar power by 2020 and 45 percent by 2030.

"We can and must raise the bar for 2020 to generate at least 27 percent of all the electricity used with renewable resources," Gabriel said.

"This is the only way we can make a significant contribution to reaching our ambitious EU goals that we passed under the German presidency in March."

Berlin held the rotating EU presidency for the first six months of this year and made curbing climate change one of its top priorities.

The European Union set a goal in March of a 20-percent cut in greenhouse gas emissions by 2020 compared with 1990 levels, but Germany is aiming to cut up to 40 percent.

Gabriel said Germany had prevented 100 million tonnes of carbon dioxide from being spewed into the atmosphere last year thanks to renewable energy sources, adding that there were now 214,000 jobs in fields such as wind and solar power.

Chancellor Angela Merkel said Tuesday at a meeting of political officials, industry representatives and environmental campaigners that Germany would seek to increase energy efficiency by three percent a year until 2020.

She cited fuel-efficient cars, houses with innovative heating systems and energy-saving household appliances as areas the government wanted to see developed.

## **Automobile and Transportation**

### **Autos play key role in bid for harmonious society**

July 5 (China Daily) -- J Harmony is an essential Chinese value, and it can be found in many ancient Chinese concepts and practices. It's found in the philosophy of yin and yang, which describes the opposing but complementary forces that can be found in all things in the universe.

Nowadays, the creation of a harmonious society in the context of economic growth and rising living standards is one of China's main objectives. As such, it must be built on the basic elements of peoples' daily lives, such as food, clothes, accommodation and transportation.

Much more than a simple means of transportation, automobiles are the machines that change a lot in people's lives, and therefore play an crucial role within the concept of harmony.

#### **Auto affordability**

With more than 20 million cars on the streets, China is on its way to shedding the image of the "Bicycle Kingdom" and becoming an "Auto Society".

Each year the automobile improves the lives of millions. Newly gained mobility offers opportunities to see relatives more often, to make daily routines more comfortable and to save time. All this contributes to a harmonious life, and reminds us that harmony grows out of individual well-being.

Affordability is one aspect to build a harmonious auto society. Chinese car manufacturers have understood that and offer low priced vehicles

between 60,000 to 80,000 yuan with small engine displacements below 1.4 liters to young Chinese families. What manufacturers need to understand is that affordability must go along with the guarantee of safety and protection. Only worry-free usage of vehicles, equipped with advanced safety features and quality assurance will lead to a harmonious feeling, something that certainly benefits foreign car manufacturers in their sales efforts.

### **Mobility and comfort**

But there's another obstacle on the road toward a harmonious automobile society: Is China catching up with the construction of roads, city development and efficient traffic systems? Probably not quickly enough! Endless traffic jams throughout the day bring the idea of mobility and comfort to an abrupt halt, and damage the perception of harmony.

China is only at a starting point regarding the harmonious cohabitation of different types of road users. Harmony in this sense has to do with responsibility, and progress will be made when car owners understand that the "stronger" part, (i.e. the person that owns the bigger vehicle), is not dominating, but protecting and taking care of the "weaker".

How about harmony between car manufacturers and customers? The auto market has switched from a seller's market to a buyers' market, where consumers have become more powerful due to a greater product selection.

Higher competition has driven prices down, which makes cars more affordable. On the other hand, there is still a lack of harmony in the relationship between car dealers and car buyers, which cannot be neglected.

Mainly due to inexperience - 70 percent of customers are purchasing a car for the first time in their lives - auto buyers rely heavily on advice and recommendations. They get these mainly from friends and family members, but only seldom from sales persons in dealerships. This is due to a lack of professional knowledge and insufficient understanding of customer needs.

### **Customer relationship**

Customer service also needs to be improved regarding the post-sales relationships. Dissatisfactions ranges from the inability to fix

sometimes even small functional problems to the lack of road-side assistance and emergency aid. Not to speak about faulty spare parts due to serious counterfeit problems.

Finally, a thought about harmony in the auto sector must not neglect the notion of harmony with nature and the environment.

A lot has already been accomplished in China by implementing stricter emissions standards. Furthermore the cancellation of restrictions on using small displacement cars by the government has prompted a rise in small vehicle demand and helped reduce fuel consumption and pollution on a macro-economic level.

Car manufacturers themselves are experimenting with various types of alternative energies, and even propose eco-friendly products, as demonstrated by Toyota with its hybrid-model Prius.

However, success and failure in establishing a harmonious relationship with the environment will eventually be decided by consumers, when they decide to abandon heavy fuel consuming vehicles and opt instead for advanced technologies.

The author is executive director in the automotive business with TNS China

### **More urban Chinese have plans to buy cars**

July 22 (XinHua) -- Soon after obtaining a driver's license, Xiao Xu, a young teacher in an industrial city in northeast China, has put car purchase on her agenda as she eagerly wants to sit behind the wheel.

Xiao Xu seems to have every reason to buy a car: economically ample, wish for a comfortable tour to work, little traffic in the city where she lives, or in other words, to improve the quality of her life.

"Anyhow, I will buy a car before my marriage," said the 26-year-old teacher with the Changchun Science and Technology University, at the Changchun International Automobile Expo.

Like Xu, more and more urban Chinese are planning to buy their own cars, no longer a luxury item as the country's rapid economic growth have plumped up their pockets.

"I want to buy a car priced between 50,000 and 100,000 yuan (US\$657 to 13,157)," said Xiao Xu, at the expo which ended on Sunday in Changchun, capital of northeast China's Jilin Province.

Similar auto shows are held in other Chinese cities every year such as Beijing and Shanghai, providing people with an opportunity to know the latest models of cars.

A saleswoman for a home-brand carmaker at the expo said young people in their 30s have become the majority of her customers.

"The number of clients who buy cars with bank loans are also on rise," said the saleswoman.

Last year, both the sales and output of cars exceeded 7.2 million in China. The national sales of automobiles may reach 10 million by 2010.

Statistics with China's Public Security Bureau shows the accumulative number of privately owned sedans has exceeded 13 million by the end of June, up 16 percent from the end of last year.

But growing number of cars brought about high-energy consumption, traffic jam and pollution from vehicle exhaust.

Energy-saving or environment friendly automobiles such as hybrid electric automobiles have attracted attention of domestic carmakers.

Wang Ziliang, Vice President of Geely, one of the major home brand carmakers, said the company has already developed a new model, which can save energy by half. The car may be sold on market in the near future.

Currently, electric automobiles have already appeared on streets in some Chinese cities

### **Quick transportation to venues**

July 13 (China Daily)-- Olympic expressways will open on nine freeways in Beijing and five co-host cities starting this month.

Vehicles used for the 2008 Beijing Olympic Games will be able to enter and exit tolls quickly when transporting athletes, officials and visitors to the different venues.

To ensure the success of the Games, the Ministry of Communications publicized a plan guaranteeing smooth communications and transportation on its website recently.

It said nine expressways are involved, including the freeways between Beijing and Qinhuangdao, Beijing and Tianjin, Qinhuangdao and Shenyang, and airport expressways in Qingdao, Shenyang, Shanghai and Beijing.

The five cities, apart from Beijing, are co-hosts of the 2008 Olympic Games.

According to the plan, toll stations on the nine freeways should open special lanes for Olympic vehicles. Signs will be placed to direct drivers.

Vehicles with special passes issued by the Olympic authorities will be allowed to pass through toll stations without paying.

Other vehicles used for the Games do not need to queue at toll stations if fees are paid in advance.

"The measures are expected to save time for Olympic-related vehicles and raise transport efficiency," the ministry said.

The "Good Luck Beijing" games, that began on July 1, will be a test for the expressways.

To ensure all roads are in good condition, the ministry has asked provincial communication administrations to carry out overall checks.

Necessary maintenance work should be done before next May. No maintenance work will be allowed after next May until 15 days after the Games conclude.

### **Car sales up 22.3% in first six months**

July 7 (China Daily)-- Passenger vehicle sales in China, the world's second-biggest auto market, grew by more than one-fifth in the first half of this year as carmakers cut prices and launched new products to woo buyers, an industry body said on Friday.

January-to-June sales of domestic-made passenger vehicles - sedans, sport utility vehicles, multi-purpose vehicles and mini vans - reached 3.08 million units, up 22.3 percent from a year ago, according to data from the China Association of Automobile Manufacturers.

Sedan sales jumped 25.9 percent to 2.29 million units.

Passenger vehicles sales in June alone were 511,900 units, up 28.6 percent from the same period last year.

Analysts attribute the buoyant growth largely to car producers' price incentives and new product offerings, such as the Skoda Octavia, Toyota's new Corolla, Nissan's Livina and the Geely Vision.

Car prices in China fell by 3.3 percent from January to June, according to Cheshi.com.cn, a Beijing-based website that tracks car prices nationwide.

On Tuesday, US carmaker Ford Motor Co's venture with Chang'an Motor Corp slashed prices of the Focus compact, its best seller, by 6,000 to 12,000 yuan.

Ford Motor China said the venture's first-half sales surged by 57 percent to 93,587 cars, including 55,676 units of the Focus.

The company, which also makes the Ford Mondeo, Volvo S40 and Mazda3 in southwestern city of Chongqing, will launch an all-new Mondeo later this year.

"Car prices will further decline in the second half as a result of mounting pressure on old products from new comparable models to lure customers," said Hua Xue, CEO of Cheshi.com.cn.

A total of 32 all-new passenger car models will be launched in China this year, according to market intelligence from German carmaker Volkswagen's venture with First Automotive Works Corp (FAW).

### **City to increase parking fees in busy areas**

July 10 (China Daily) -- Beijing authorities are considering increasing parking fees in busy areas to discourage people from driving and to clear up key arterial roads.

Among those areas likely to be targeted are busy commercial districts like the CBD and Zhongguancun, and congested areas like Yansha and Beijing Western Station, according to the Beijing municipal development and reform commission.

An official surnamed Wang with the Beijing municipal bureau of transportation's parking administration said the price increases could push people towards using public transportation.

"If we build more roads and more parking places, it just stimulates people to buy more cars," Wang said.

"Increasing parking fees should encourage more people go out by public means of transport instead of using private cars."

Parking fees in the busiest areas are 2.5 yuan per half hour for small cars and 5 yuan per half hour for large vehicles, about 3 yuan more than other areas.

Yue Zhongqiang, a CPPCC National Committee member, said increasing the fee would improve traffic flows and save motorists time finding a parking spot.

"But around major public places, like stations, we have to consider affordability for citizens."

In addition, the higher roadside parking fees could encourage the use of underground parking lots, according to the commission.

Beijing announced last year that 26 free or low-cost large-scale parking lots would be built near subway and bus stops to encourage drivers to use public transport in downtown Beijing.

Parking fees near major subway stations and bus terminals on the city's outskirts are to be lowered to encourage people to park their cars there and then travel to urban areas by public transportation, according to the commission.

The new fee rates will be released after further consultation.

Zhao Fengtong, vice-mayor of the Beijing municipal government, said early this year that Beijing had 940,000 parking spaces but still needed another 400,000.

### **Chery to make Chrysler cars**

July 5 (China Daily) -- Independent Chinese carmaker Chery Automobile Co clinched a landmark deal in Beijing with US-based Chrysler Group yesterday to make small cars for the North American and European markets.

The first model in the partnership will be a Dodge based on Chery's 1.3-liter A1 hatchback, said top executives of the two sides.

The car, to be assembled at Chery's home base in eastern city of Wuhu, will be first shipped to Mexico before January, Chery sources said.

However, no timetable has been revealed for the launch of Chery-made Chrysler cars in the US and Europe, where other Chinese carmakers have faced quality problems recently.

Chrysler CEO Tom LaSorda said he has "no concerns" about Chery-made vehicles and both companies would develop new globally competitive products based on future Chery small-car platforms.

The tie-up with Chery will have a "nearly immediate effect" on Chrysler's offerings in the small-car segment, LaSorda said.

"This strategic partnership is part of a new business model that allows us to introduce new products more quickly, with less capital spending," he said.

Yale Zhang, director of Greater China vehicle forecasts for consultancy CSM Worldwide (Shanghai) Ltd, said Chrysler will be able to take advantage of Chery's low costs in China.

"It could be unprofitable for Chrysler to develop small cars on its own," Zhang said.

For Chery, which is growing sales at home and abroad aggressively, the collaboration will help it improve quality and design to pave the way for its own brand's forays into the US and European markets, he said.

The company said earlier that it aimed to boost sales to 400,000 cars this year from 305,000 units in 2006. It expects to double exports to 100,000 units.

Chrysler, which is being sold to Cerberus Capital Management by DaimlerChrysler in a \$7.4-billion deal expected to close as early as this month, now produces the 300C large sedan in a plant in Beijing.

It plans to bring a Sebring mid-sized sedan into the Beijing plant and a Dodge Caravan minivan into another factory in the eastern city of Fuzhou

later this year to further explore the Chinese vehicle market, the world's No 2 after the US.

Sales of China-made vehicles totaled 3.65 million units in the first five months of this year, up 22 percent from a year ago, according to industry data.

### **Honda plans brand for China**

July 20 (China Daily) -- Japanese carmaker Honda Motor Co's joint venture with Guangzhou Automobile Corp yesterday announced that it will create an all-new brand, the first model of which will be introduced in 2010, a bold move as all major Sino-foreign passenger car partnerships are assembling only overseas marques.

The 50-50 venture, called Guangzhou Honda Automobile Co, said it plans to develop a series of new models that won't bear the Honda imprint through a newly formed research and development center.

But the company, which is making Honda's mid-sized Accord, compact City, subcompact Fit and Odyssey wagon in the southern city of Guangzhou, didn't reveal the name of the new brand or what kinds of new models it will offer.

The venture said it will initially spend 2 billion yuan on a research and development center that is to be operational next year.

Guangzhou Honda's new-brand plan follows regulators' calls for Sino-foreign car ventures to accelerate development capacity and even create their own badges instead of being low-cost assemblers of overseas nameplates.

Chen Jianguo, an official from the National Development and Reform Commission, China's top industry watchdog, said yesterday that "Guangzhou Honda is leading joint ventures in building new brands which will make the others attach great importance in this field".

Shanghai Volkswagen Automobile Co, the Sino-German car venture, said on Wednesday that it and Volkswagen AG would jointly develop a new mid-range sedan for the Chinese and North American markets.

But the new sedan, based on the venture's existing Passat Linyu, will still bear the Volkswagen logo.

Top executives from Guangzhou Honda and the parent Guangzhou Automobile said the venture's new-brand program is the result of its growing scale of economy and localization as well as strong financial and intellectual reserves.

Atsuyoshi Hyogo, Honda's China chief, said the Japanese carmaker will "completely" back the venture's self-development endeavor by providing technical and talent assistance.

"However, creation of a new brand is an unprecedented challenge for the venture," Hyogo said.

Sales of Guangzhou Honda, which started production in 1998, climbed by 7.8 percent year-on-year to 133,173 vehicles in the first half of this year, ranking it No 6 in China's passenger car sector. It aims to sell a total of 310,000 units this year, up from 260,000 units last year.

The venture, one of the most profitable carmakers in China, posted more than 5 billion yuan in 2006 profits.

Eighty-five percent of spare parts for its current models are locally made.

Honda also has a tie-up with Dongfeng Motor Corp in the central city of Wuhan, producing the compact Civic and CR-V sport utility vehicle.

Overall passenger car sales in China, the world's second-biggest vehicle market, jumped 26 percent to 2.55 million units from January to June, according to industry data.

## Oil and Gas

### Organic oil

July 2 (China Daily) -- A farmer's son will have no difficulty reading news about biofuels used in the United States - he only needs to know the word corn. But in China, the news about biofuels might be a challenge for a medical doctor to understand if his Latin is not good enough.

The terms sound obscure: Canola, *Jatropha Curcas*, *Pistacia Chinensis*, *Cornus Wilsoniana* and *Xanthoceras Sorbifolia*. Yet translated into simple business English, they actually mean one thing - diesel.

More and more Chinese farmers are now aware of what they are - woody oil plants that can all be materials for China's biodiesel of the future.

Chinese officials tell China Business Weekly that biodiesel will soon carry greater significance in easing the energy thirst of the rapidly developing nation, as technology, markets and environmental policies for alternative fuels are maturing.

This was noted by Qiu Hongwei, a senior official with National Center for Biotechnology Development under the Ministry of Science and Technology, at the 2007 International Conference for Bio-economy held last week in Tianjin.

Reinforcing Qiu's point, Xu Guanhua, former Minister of Science and Technology, said at the conference that biodiesel should be an option to relieve the country's energy shortages.

In reality, the biodiesel industry is still in a nascent stage in China, with production of only 200,000 tons in 2006. The market demand for biodiesel was 120,000 tons last year. Qiu forecasts the demand for biodiesel will soar to 1.5 million tons by 2010 and 2.7 million tons by 2015.

There is a growing tendency for biodiesel to replace traditional diesel products, despite current modest biodiesel consumption, Qiu says.

The country used 117.76 million tons of diesel last year, Qiu notes. By 2010 consumption is estimated to increase to 148.6 million tons and by 2015 is projected to be 180.8 million tons of diesel.

Truck ownership in China reached 13 million units in 2004 out of the total 41.8 million vehicles on the road. Ever-increasing numbers of vehicles require surging volumes of diesel, the most widely used fuel for trucks in China.

### Benefits

Biodiesel is equivalent to diesel, with high energy density and excellent lubricating properties, yet is renewable and biodegradable and also generates low emissions when burned.

Raw materials for making biodiesel include herbage oil crops, woody oil plants, waste oil and hydrophilic oil plants.

In the US and Europe, herbage oil crops are often used to feed biodiesel production. In China, where crops are not as plentiful as in developed countries, biodiesel is made mostly from waste oil and woody oil plants.

Developing biodiesel in China can bring benefits to farmers and the agriculture sector as a whole by stimulating the development of oil forestry, improving the availability of accessory products and extending the agricultural industrial chain.

"Through these approaches, farmers' incomes can be hiked, and ultimately we can leap-frog development in undeveloped regions of the country," Qiu says.

The environmental benefits of burning biodiesel are also obvious - lower emissions of carbon dioxide and other exhaust gases, lower pollution to the water and soil and more land saved, Qiu says.

Despite of country's limited arable land, China boasts great potential for planting woody oil plants by making use of idle winter land.

Waste oil is also a material for making biodiesel. Qiu estimates that there will be three to five million tons waste oil available every year for making biodiesel.

Costs for making biodiesel come from both raw materials used and technology adopted, says Yu Longjiang, professor of Huazhong University of Science and Technology.

"About 70 percent of the cost is from raw materials, with the rest for technology used. Better materials can save technology costs, while cheaper materials demand sophisticated and more expensive technologies," Yu tells China Business Weekly.

### **Technology advice**

For research and development (R&D), Qiu says that there are over 30 research institutions and up to 3,000 scientists and engineers working on bioenergy-related R&D in China.

With a strong R&D capacity, some technological breakthroughs have been achieved in China. A new type of enzyme, known as a lipase, has been developed that can transform waste cooking oil into biodiesel. The cost of lipase is

about 150 yuan per kilogram, while the cost of biodiesel is about 3,000 yuan per ton.

To further enhance bio-diesel technology, Qiu gives some advice.

"First, we should constitute national standards for biodiesel as soon as possible. Second, the state should enhance specific R&D support for biodiesel to boost technical maturity. Third, a national-level R&D center for biodiesel should be built," Qiu says.

### **Policy suggestion**

China is encouraging the development of renewable energy with the Renewable Energy Law that took effect last year.

The National Development and Reform Commission, China's top economic planner, has decided to set up biomass hi-tech industrialization demonstration projects, aiming to build a biomass industry to replace 10 million tons of oil and save five million tons of coal by 2010.

However, the authority should give a bigger shot in the arm to biodiesel development, Qiu suggests.

There should be more preferential tax policies, he says. The State should also expend more efforts in perfecting the investment and financing mechanism for the biodiesel industry, he adds.

"The biodiesel industry in China has great potential in long run, but it has a tardy development now because of energy policies and insufficient market growth. The biodiesel industrial development needs support from the government and the cooperation between (research) institutions and enterprises," Qiu concludes.

### **Sinopec could swing back to red**

July 19 (China Daily) -- Sinopec Corp outperformed bigger rival PetroChina in terms of annual crude output growth and increase in oil refining during the first half of 2007. But the top Asian refiner is likely to witness losses with its refining arm in the second quarter, analysts say.

"The growth pace of Sinopec's crude production surpasses a PetroChina's from January to June, proving the major refiner is paying more attention

to upstream exploration and production. But because of soaring global oil prices since the second quarter of this year, Sinopec may suffer net losses again from its refining business," said Yin Xiaodong, an oil analyst at CITIC Securities Co.

Agreed Liu Gu, a senior energy analyst with Guotai Jun'an Securities. But because of its decent first-quarter refining profit, the result of Sinopec's refining business in the first half of this year may not be in the red, Liu said.

The company's refining business made a profit of 4.17 billion yuan in the first quarter, thanks to lower crude prices. Sinopec spokesman Huang Wensheng said the refiner's profit for the second-quarter would not be available until August 24.

There were media reports earlier this month citing anonymous sources from the National Development and Reform Commission saying Sinopec and PetroChina have applied to raise prices of oil products to reduce refining losses. Huang refused to comment on the reports.

Sinopec pumped 143.88 million barrels (20.26 million metric tons) of crude in the first half of this year, up 2.12 percent year-on-year. The company refined 6.38 percent more crude from January to June this year, reaching 76.25 million metric tons, the company said in a statement yesterday.

Year-on-year growth of Sinopec's crude output outperformed PetroChina's 0.1 percent rise in the first half, but gas production growth lagged behind PetroChina's 16.5 percent.

During the first half of the year, PetroChina processed 407 million barrels of crude, up 3.8 percent year-on-year.

Sinopec's refining arm returned to profit in the fourth quarter of 2006, but it is likely to swing back to the red this year as crude prices rose to a 10-month high of over \$70 a barrel at the end of June from a 19-month low of around \$50 in January, Reuters reported.

### **Step on the gas**

July 2 (China Daily) -- Bosch Group, a global supplier of technology and services for automotive and industrial technology, consumer goods and building technology, has pledged its

willingness to help China cut greenhouse gas emissions.

"We offer an entire range of products and developments that help achieve a further significant reduction in pollution emissions," says Bernd Bohr, member of the Bosch board of management and chairman of its automotive group.

Bosch is willing to transfer its latest technologies in efficient automotive drivetrains and exhaust gas reduction to China, Bohr tells China Business Weekly.

Early last month, China announced its first climate change action plan and pledged to cut greenhouse gas emissions. The plan, co-drafted by 16 ministries, is the first of its kind in developing countries, which are exempt from emission caps till 2012 under the Kyoto Protocol.

Bosch's technology can help China realize its ambitious goals of cutting greenhouse gas emissions as it is a leader in increasing fuel efficiency and reducing carbon dioxide (CO<sub>2</sub>), as well as renewable energy resources, Bohr says.

"(Our) aim is to make vehicles as emission-free as possible," he adds.

Tougher emission regulations throughout the world, including in China, make this objective a top priority, he notes.

Bosch will increase its production of common-rail systems, which produce low exhaust emissions, in the country from 100,000 units in 2007 to 1.3 million units by 2010 to help meet the rising demand for low-emission vehicles.

Common-rail systems are now mainly used in heavy-duty and light commercial vehicles. Bosch also has plans to introduce the technology to passenger cars in the near future.

"With modern technology like this, we will be in a position to at least halve emissions of particulate matter and nitrous oxide over the next 30 years, even if the number of passenger cars on the roads increases more than 10-fold," Bohr says.

As well, its "start-stop" system currently going into production at a major German automaker enables fuel consumption to be cut by 8 percent in urban traffic.

"This is only one step on our way to reducing carbon dioxide emissions by cutting fuel consumption. We are joining forces with automakers to create technology packages that we then harmonize with requirements of the respective vehicle type," Bohr says.

In the long term, Bohr says, Bosch's goal must be not just to cut CO2 emissions, but to make driving CO2-free, which can be achieved using fuel-cell technology that runs on hydrogen.

Peter Pang, president of Bosch China Investment Ltd, says that China is a very important market for Bosch as sales of its automotive products have seen dynamic growth, climbing by 25 percent year-on-year since 2001.

Market observers are expecting a new record of 8.3 million vehicles sold in 2007, of which 6 million will be passenger cars.

The robust growth of the automotive industry has a cost to the environment, so the Chinese government is encouraging the industry to move up the value chain and use resources economically, says Pang.

Bosch is prepared for the challenges of the Chinese market, he says.

Three research and development centers of Bosch, in close proximity to automobile manufacturers, enable the German firm to develop the products locally in the shortest possible time, which is a key advantage for Bosch, Pang says.

"Products with high local content help us remain competitive," he adds. "For example, our annual production of gasoline injection nozzles in China amounts to more than seven million units and we produce well over one million gasoline pumps per year."

With a strong footing in China for research and development and original equipment "Bosch is very well positioned to secure an appropriate share of the enormous growth on the Chinese market", Pang says.

### **Save every drop of oil**

July 19 (China Daily) -- A multi-layered oil reserve system capable of cushioning China against oil supply shocks is needed to sustain the country's economic growth.

However, the oil reserve should be combined with more efforts to increase the country's overall energy efficiency. This would be the best way to ensure long-term energy security.

As the world's fastest-growing major economy and second largest oil consumer, China has a huge interest in maintaining a stable supply of crude oil.

The country's crude imports have outpaced its domestic production in recent years in order to meet strong demand boosted by fast economic growth. It imported 81.5 million tons of crude in the first half of this year, up 11.2 percent from a year ago.

Given the rapid pace at which the Chinese economy is growing, it would be reasonable to expect oil imports to grow rapidly over the next two decades.

Under such circumstances, a multi-layered oil reserve system that includes both national strategic reserves and corporate reserves is a key tool to help China withstand any interruption to its oil supply.

China has already kicked off work on its first four strategic oil reserve bases and is busy selecting a second batch.

The country is considering creating corporate reserves to help leverage demand and supply. It has been alleged that China's first energy law will require that commercial oil reserves be set up at the corporate level.

Such endeavors will prepare China for a rainy day.

But, to truly face the country's long-term energy challenges, China must redouble its efforts to improve energy efficiency.

The country's efforts to ensure a stable oil supply do not mean that domestic enterprises and individuals should feel free to consume as much oil as they want. The goal of such an undertaking is to minimize the effects of abrupt fluctuations in the oil supply, giving the country room to improve its energy efficiency.

The price of crude oil in the international market is rising toward a record level, so China is competing against time to become more efficient.

The national campaign to reduce by 20 percent the amount of energy the country uses per unit of GDP by 2010 is just the first step toward securing its long-term energy security.

To achieve this goal, policymakers should speed up efforts to introduce a market-oriented pricing system to reflect the rising cost of oil and other sources of energy.

### **More oil reserve bases to be built**

July 17 (China Daily) -- China plans to build four levels of crude oil reserves made up of two parts - the government reserve and enterprise storage - according to a source with the nation's largest oil company.

"The government reserve will be at two levels, a strategic crude oil reserve base by the central government, and an oil reserve base by local governments," an official with PetroChina, who declined to be named, said.

"The enterprise storage will also be at two levels, commercial oil reserve by the largest oil companies PetroChina, Sinopec and CNOOC, and oil storage by the medium and small ones," he said.

The strategic oil reserve base by the central government and the oil reserve by the nation's leading oil companies are under way, and the other two levels are still in the preliminary stage, the official said.

The country also plans to formulate some regulations for oil reserves, he said.

"A sound oil reserve system will help ensure the nation's energy security, in case there is an interruption in supplies or a hike in oil prices," Han Xiaoping, chief information officer of China5e.com, said.

In some regions that are hungry for energy such as South China's Guangdong Province, the local government has started to plan for oil reserves, Han said.

China is now the world's third largest oil importer after the United States and Japan and the world's second largest oil consumer after the US. In the first half of this year imports of crude oil rose 11.2 percent to 81.5 million tons, according to the General Administration of Customs (GAC).

Last year, China imported 145 million tons of crude oil and 36.4 million tons of refined oil, spending \$15.3 billion more than the year before because of soaring oil prices in the global market, the GAC said.

Analysts said China will use up to 350 million tons of oil this year, 10 million tons more than last year.

Beginning in 2004, China started to build its strategic crude oil reserve bases in three provinces. The first batch consisted of four bases, two in Zhejiang, one in Shandong, and the other in Liaoning.

Last month, PetroChina started to build a commercial crude oil reserve base in Liaoning. It plans to build another in the Xinjiang Uygur Autonomous Region.

Other top oil companies, such as Sinopec and Sinochem, have also started to build bases, a PetroChina official said.

### **Major energy deals signed**

July 18 (China Daily) -- China and Turkmenistan yesterday signed a series of cooperation agreements on trade, technology, education and energy, including two on sharing natural gas products and gas purchase.

According to a joint statement signed by President Hu Jintao and his Turkmenistan counterpart Gurbanguly Berdymukhamedov in Beijing, the two countries agreed to expedite talks on energy partnership to complete the proposed China-Turkmen gas pipeline at the earliest.

China's largest oil producer, China National Petroleum Corp (CNPC), and a Turkmen government agency signed the product-sharing contract, and the gas purchase deal was inked between CNPC and a Turkmen natural gas firm.

During his meeting with Berdymukhamedov, Hu proposed to enhance political mutual trust, deepen economic and trade relations, increase cultural and personal exchanges and strengthen security partnership.

Hu said: "The two sides should fully develop their advantages and expand cooperation in trade, oil, gas, transport and telecommunication."

In response, Berdymukhamedov said his country is ready to strike deals on natural gas.

Turkmenistan is willing to join China in the fight against terrorism, separatism and extremism, too, he said.

It is committed to maintaining peace, stability and development in the region.

The Turkmen president was accorded full military honors, complete with a 21-gun salute after he arrived in Beijing yesterday afternoon on a two-day state visit. This is first visit since he assumed office in December last year after the death of his predecessor Saparmurat Niyazov.

When Niyazov visited China in April last year, the two countries signed an agreement, according to which China would buy 30 billion cubic meters of natural gas a year from the resource-rich Central Asian country for 30 years. The gas is to be delivered through a pipeline to be built by 2009.

Analysts, however, said some technical problems have to be solved - especially in building of the pipeline - to smoothen the energy cooperation between the two countries, although they already have a partnership agreement.

"The biggest problem is in building of the pipeline, which will have to pass through a third country, most probably Kazakhstan and Uzbekistan. So the energy cooperation has to involve other Central Asian countries, too" Sun Zhuangzhi, a Central Asian expert with the Chinese Academy of Social Sciences, said.

Turkmenistan has the largest gas deposits among the former Soviet republics after Russia.

### **Oil refiners seek gasoline price hike**

July 18 (China Daily) -- In response to another round of rising global crude prices, China's top oil producers are considering seeking approval from the National Development and Reform Commission (NDRC) to increase prices of gasoline and diesel.

The nation's two largest oil companies, China National Petroleum Corp (CNPC) and China Petroleum & Chemical Corp, are among the firms that want a price hike for refined oil products, according to industry insiders.

"If global oil prices continue to skyrocket, the nation's top economic planner NDRC will undoubtedly regulate the price," said Gong Jinshuang, a senior analyst at the Economic and Technology Research Institute with CNPC, the nation's largest oil company.

"But the NDRC will be scrupulous about approving a price hike as it may intensify pressure on the consumer price index (CPI)," he added.

According to the NDRC, China's CPI this year may rise by over 3 percent, the warning line set by the central bank. In May alone, the CPI reached a two-year high growth of 3.4 percent after rising by 3.1 percent in March and 3.0 percent in April.

If higher prices for oil products are approved, such an increase would be the first adjustment since January, when China lowered prices for domestic gasoline by 220 yuan per ton and jet fuel by 90 yuan per ton - while keeping diesel prices steady - in response to falling international oil prices.

China has raised the price for refined oil products 12 times since 2003, including twice in 2006.

### **Refining losses**

International crude oil prices have hovered above \$70 a barrel in recent weeks, squeezing profit margins for local refiners.

"If the trend continues and the price for local oil products doesn't increase, domestic oil companies will see widening refining losses," said Liu Gu, an energy analyst with Shenzhen-based Guotai Jun'an Securities Ltd.

The nation's largest oil refiner Sinopec, which imports 70 percent of its crude oil, will see a loss in its second-quarter refining business due to high crude oil price, she said.

The refining business of New York and Hong Kong-listed Sinopec recorded a profit of 4.17 billion yuan in the first quarter due to lower crude oil prices. In 2006 its refining loss widened to 25.3 billion yuan from 3.54 billion yuan a year earlier.

China's crude oil imports have outpaced its domestic production in recent years to satisfy increasing demands for energy. From January to

June, China imported 81.54 million tons of crude oil, up 11.2 percent year-on-year. Analysts forecast full-year imports to climb 10 percent from 145.2 million tons in 2006.

PetroChina, the listed company of CNPC, will import 40 percent of the crude oil it needs for refining this year, up from 30 percent in 2006, a company official said earlier.

#### Oil reserves

To ease risks from fluctuating prices, domestic oil companies should expand stockpiles, said Han Xiaoping, a veteran energy analyst with China5e.com, one of the top energy websites in China.

PetroChina began building a commercial crude oil reserve facility in Northeast China's Liaoning Province in late June. The company plans to build another commercial crude oil reserve site in Northwest China's Xinjiang Uygur Autonomous Region.

Other top Chinese oil companies, such as Sinopec and Sinochem, have also embarked on construction of commercial crude oil reserve facilities, said an official with PetroChina.

China started to build its strategic reserve system in 2004 beginning with four facilities, two in Zhejiang, one in Shandong, and a fourth in Liaoning province.

The two bases in Zhejiang are now operational with a capacity of around 5 million tons each. The others are expected to start operations between late 2007 and early 2008.

## Climate Change and Air Pollution

### Public awareness vital to environment

July 21 (China Daily) -- Many of the environmental disasters erupting in the country could have been avoided, or at least wouldn't have been so bad, if there was strong public environmental awareness.

One example is the recent public protest against the PX chemical plant planned for Xiamen in East China's Fujian Province. The plan has to be changed under heavy pressure from local residents who fear possible health hazards of the giant chemical plant in the scenic city.

Meanwhile, construction of the Shanghai-Hangzhou maglev also seems to have been stopped, at least for the moment, due to the strong protest of people living along the planned route over possible magnetic radiation pollution.

While there are more cases reflecting increasing public environmental concern, such awareness is still low among the general public.

According to a 2006 study released at the beginning of the year by the China Environmental Culture Promotion Association, environmental awareness of Chinese scored just 57 points.

A big headache that arises from low public environment awareness comes during national holiday weeks, when managers of not a few scenic spots across the country have to cope with littering as tourists number dramatically rise.

Many Chinese do not observe the basic civic code regarding environmental protection.

This was a big contrast to when I hiked in the Manoa Valley in Oahu, Hawaii, more than a decade ago. My friends there carried garbage bags on their backs. People were told not to leave any trace there, except footprints.

Having probably the most beautiful beaches and best environment in the world, people in Hawaii still kept talking about a possible environmental and ecological crisis on the islands.

On weekends, volunteers - old and young - were seen on the beaches picking up garbage left by careless tourists.

Building up such an environmental awareness is no easy job. It would take a long time, possibly longer than a generation.

A decade ago, Shanghai launched the "Seven Nots" drive, which included things such as no spitting, no littering, no vandalism on greenery and no smoking. A decade later, the city's streets are cleaner, but spitting, littering and smoking in forbidden areas are still common. Such uncivil behavior would be a big challenge in 2010 when Shanghai intends to host a green World Expo.

If all Chinese can demonstrate the kind of environmental awareness like those protesting PX plant in Xiamen and those objecting the maglev line in Shanghai, the hundreds of

thousands of polluting factories along our waterways would not have been constructed in the first place.

If there is a strong public environmental awareness, the industrial park being built so close to the pristine Wuyi Mountains I visited months ago would not be able to start construction, either.

If there is strong public environmental awareness, corporations would have much more to worry about if they don't strictly observe environmental codes. Governments at various levels would also be reluctant to develop the economy at the cost of our environment.

If there is a strong public awareness, our rivers would be cleaner, our air fresher.

Public environmental awareness is about everything. It's about keeping an eye on corporations. It's also about urging government environmental agencies to do their jobs.

More importantly, it's also about asking individual Chinese every day how environmentally friendly, or how green, is your lifestyle and behavior.

Have you tried to use public transport and energy-saving light bulbs? Have you tried not to use disposable chopsticks, or not to turn your air-conditioners too low in summer, or you heat too high in winter?

Have you recycled waste paper, bottles, and bring your own shopping bags to supermarkets? The list goes on.

Although the many environmental disasters happening in the country have served as a painful and awakening lesson for raising public environmental awareness, such education should really start from our schools and even kindergartens.

The class that boasts of China's vast territory and rich natural resources should include chapters on our grave environment challenges - about 40 percent of the country's waterways are seriously polluted. About 300 million farmers lack access to clean drinking water.

While the government should play its role in raising environmental awareness, the many environmental NGOs should be encouraged to exert their influences.

In fact, many NGOs are already doing a lot in educating the public.

For example, Roots & Shoots, launched by Jane Goodale, has built a strong grassroots network in many Chinese schools to raise the awareness of the generation that is going to inherit our generation's environmental mess.

Other organizations, such as Friends of Nature, have also held various activities to promote grassroots environmental awareness.

The global Live Earth concerts, which ended in Shanghai on July 7 amid pouring rain, was a successful public campaign in this regard.

While most people bet on tough laws and law enforcement, public environmental awareness could become an even powerful force to help keep our planet clean.

### **Green GDP report "indefinitely postponed"**

July 23 (Reuters) --China has stopped the public release of an official study putting a cost to the nation's environmental damage, a government researcher told a Chinese newspaper, blaming official reluctance to confront pollution.

The Beijing News reported on Monday that the release of a "green GDP" report computing the cost of pollution and ecological degradation in 2005 had been "indefinitely postponed".

Wang Jinnan, a senior expert at the Chinese Academy for Environmental Planning who was technical head of the project, said publicising the cost of bad air, water and soil had drawn fierce opposition from local officials eager to maintain growth.

"Taking out the costs of environmental damage would lead to a huge fall in the quality of economic growth in some areas," Wang told the paper.

"At present many areas still place GDP above all else, and when such thinking dominates, the size of resistance to a green GDP can well be imagined."

Wang said some provincial governments had lobbied the State Environmental Protection Administration (SEPA) and the National Bureau of Statistics not to release the data.

The report was originally scheduled for release in March, the China Youth Daily reported

A previous report for 2004 had calculated that environmental degradation that year cost 511.8 billion yuan (\$67.7 billion) or 3.05 percent of gross domestic product -- a figure one SEPA official said at the time was "shocking".

That earlier report was issued in September last year with official fanfare and wide domestic media attention.

The report for 2005 shows "losses from pollution and reduction in the GDP indicator even higher than the 2004 report", the paper said, citing a weekend seminar on the study.

The report would also have computed economic losses from pollution for each province -- a sensitive step in a system where maintaining economic growth can be crucial to officials' promotion prospects.

Wang said that SEPA and the statistics agency had "major differences" over what the report should say and how it should be distributed.

The China Environment News, SEPA's official newspaper, argued earlier this month that the "green GDP" idea was essential to breaking officials' fixation on growth.

"We must use green GDP, this powerful restraining device, to further intervene and correct," the paper said.

But the head of China's statistics bureau, Xie Fuzhan, said on July 12 that the government had stopped using the term "green GDP" -- previously promoted to cover measures of growth that took into account environmental costs.

Xie said the term was not internationally accepted, but China would continue issuing statistics on energy efficiency, land use and emissions.

Some Chinese economists have also said that methods and data available for calculating economic losses from environmental exploitation were still too crude for open use.

Without the support of the statistics agency it would be impossible to continue research

seeking to calculate the costs of environmental harm, Wang said.

### **Environment protection a shared responsibility**

July 12 (China Daily) -- As the final harmonies of the Live Earth concert in Shanghai faded, Western journalists started singing their predictable songs about China's environmental problems. The lyrics are now very familiar - filthy factories, coal-fired power stations, glaciers melting, pollution affecting Seoul and Tokyo, and rivers too toxic to touch.

For balance, the journalists usually provide a sentence reminding us that China's environmental footprint is still below that of the United States and other industrialized nations. The first half of the next sentence then accepts a theoretical right for China to equalize pollution to equalize wealth but after a comma, the right is revoked.

Western journalists miss a significant problem. Using nation-based statistics to argue about the environmental impacts of a globalizing world is intellectual deceit.

Even if it were possible to calculate accurately the CO2 emissions from electronics factories in China, does that mean that Chinese electronics companies must bear full responsibility for these emissions? If we think the "polluters" are only those who directly create the pollution, we could simply blame welders and lorry drivers, not factory owners or governments. But if factory owners and governments also carry some responsibility, so too do those who purchase and use the products from those factories anywhere in the world.

The concept of "polluters" must include all those who benefit from the production of a product and many, often most, of the consumers of Chinese products will not be in China.

Western analysts are now becoming more careful about applying simplistic nation-based standards to the re-cycling of discarded electrical goods.

Local Chinese people may benefit from the jobs this creates, but it is realized that they also suffer the resultant health problems and toxic air and water. The important point is, where do the discarded electrical goods come from, and who

benefits from using and then discarding them? It is not just China.

A similar logic applies when wealthy countries import cheap food and flowers from less wealthy countries. They are, in effect, stealing water and soil nutrients from the poorest people in the most ecologically fragile parts of the world.

Many companies are now transnational, and that further obfuscates responsibility. America has exported at least a grubby toe of its environmental footprint to Mexico, via the filthy US-linked factories in the Maquiladoras region just over the border. Should England or China be responsible for the environmental emissions from the new Shanghai Motors factory in Birmingham UK, or the dealers that will sell the cars in Europe and America? Should China be blamed entirely for the emissions from using imported oil, or the Arab states that make massive profits from extracting and exporting it?

What of the responsibility of those who benefit from investing in transnational companies, through the international financial markets? And what is America's responsibility for the pollution from the Chinese factories that created the wealth that is now invested in US Treasury bonds?

For two millennia, Western civilizations have claimed that the best political leaders are those who benefit their citizens by importing "goods" and exporting "bads". The "goods" may include material resources, ideas, and talented people. The "bads" range from smoke, or effluent from public sewerage systems or factories, to convicts.

Plato's vision of a republic and its laws, only worked if unwanted people - such as criminals, orphans and widows - could be exported to his hypothetical "colonies". The Western colonial rulers implemented the inequitable transfer of human and material "goods" and "bads" on a global scale during their colonial expansionism, including the export of criminals to populate and build their actual colonies. But the world has now run out of "colonies".

China seems to be continuing the tradition as it builds industrial complexes, staffed by Chinese workers, near the sources of raw materials in Africa and elsewhere. The manufactured "goods" are imported to China or elsewhere, but there are also "bads", such as factory pollution.

Forgetting Western history, the Western press is starting to notice and condemn these recent practices.

Journalists point out that Liberia, for example, should not be responsible for the pollution caused by the new Chinese rubber factories there. But who will benefit by using those rubber products? It is not just Liberia or China.

In 1997, I proposed to Britain's cabinet minister, Mo Mowlam, that the "polluter pays" principle is only a starting point, even at a local level. It is a convenient but lazy notion of responsibility. Any regulatory or legal system must, of course, recognize direct blame and liability for environmental problems. But there must also be a concept of the "implication" of all those who intentionally benefit from any activity that harms the environment.

The manufacturer of a plastic bag certainly carries primary responsibility for its production, but you and me are also implicated if we use it. So similarly, the Westerner with the Walkman is partly responsible for the global impact of its production and disposal, wherever that happens.

Environmental problems are not unique in their potential for deceit through nation-based statistics. We are told that the percentage of the Indian population that is illiterate has decreased over recent decades. Yet the actual number of illiterate people in India is greater than the total population of the continent in 1947. If measured in terms of the number of illiterate people per sq km, there has been a rise in illiteracy.

If calculated as a percentage of the world's population, India's decline in literacy is dramatic, notably in comparison with China. And whatever the statistical tricks, the true outcome is that an increasing number of Indian people are excluded from the benefits of global interaction.

Evolution has given the human brain two exceptional abilities. One is to input and process very large amounts of information. The second ability is to process and throw away very large amounts of information. If we did not have this second ability, we would suffer from something like autism, a mental disability typified by excessive information processing and attention to unnecessary detail.

But the downside of this ability to discriminate and discard is that we are programmed not to

think too much about what we throw away - whether in the form of people or pollution. If evolution has not programmed us to perceive the throw away problem globally, statistical methods should be deployed to improve our global perception not to make it worse.

Aware of the growing rich-poor gap, President Hu Jintao wants to build a more "harmonious society" in his next term of office. Hopefully that principle can be extended internationally, and China can demonstrate to the world that the old Western-style colonial-inspired trade in "goods" and "bads" is no longer viable.

Harmony must resonate with its environment, and that environment is now global and connected. However beautiful the music, there can be no harmony in a vacuum.

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### **US, China to get climate change chance at summit**

July 16 (China Daily) -- The world's two biggest polluters, the US and China, will have an unprecedented chance to thrash out action on climate change at an upcoming summit in Australia, Prime Minister John Howard said Sunday.

US President George W. Bush and Chinese President Hu Jintao will be among 21 leaders at the Asia-Pacific Economic Cooperation (APEC) forum in Sydney in September, where global warming is expected to be high on the agenda.

"This will be the first and best opportunity for the two largest polluters in the world -- the United States and China -- to come together," Howard told reporters.

"At a lot of these other meetings, the Americans and the Chinese aren't sitting down together, except as part of the enormous concourse of everybody in the United Nations' ambit."

Howard said he expected there would be "a very significant discussion about climate change" at the meeting.

"I'm not suggesting we are going to solve the problem of climate change at APEC, but I do

think it will be a principal point of discussion," he said.

"Having both China and the United States around the same table is a huge advantage."

Howard's conservative government has adopted a cautious approach to climate change, joining the United States in refusing to sign the Kyoto Protocol on reducing greenhouse gas emissions.

But as scientific evidence linking global warming to human activity mounts and public pressure for action grows, the prime minister has declared himself a "climate change realist" and embraced action including emissions trading.

Fellow convert Bush said last month the US was ready to take a leading role in a global bid to fight climate change but said China and India must get on board.

"The US will be actively involved, if not taking the lead, in a post-Kyoto framework, a post-Kyoto deal," Bush said on the sidelines of a Group of Eight summit in Germany.

"By 2008 the world's emitters of greenhouse gases should come together. Nothing is going to happen in terms of substantial reduction unless China and India participate."

At the G8 meeting, however, the leaders of the world's wealthiest nations were content to simply declare their intention to pursue "substantial" cuts to dangerous greenhouse gas pollution, with no actual concrete goals laid down.

### **Scientists say climate change reducing flow of rivers**

July 16 (XinHua) -- Climate change linked to the contraction of wetlands at the source of the country's two longest rivers, the Yangtze and the Yellow, has reduced the volume of water flowing in them, scientists said.

Scientists from the institute of mountain hazards and environment under the Chinese Academy of Sciences (CAS) studied changes over the past 40 years to the wetlands on the cold Qinghai-Tibet Plateau in west China where the two rivers have their source.

Analyzing aerial photos and satellite remote-sensing figures, they found the wetlands on the plateau have shrunk more than 10

percent over the past four decades. The wetlands at the origin of the Yangtze have suffered the most, contracting by 29 percent.

In addition, about 17.5 percent of the small lakes at the source of the Yangtze have dried up, the scientists said.

"The wetland plays a key role in containing water and adjusting the water volume of the rivers," Wang Xugen, a researcher with the institute, said.

"The shrinking of the wetland on the plateau is closely connected with global warming," Wang said, adding that - even though rainfall has increased in the region - the contraction of the wetland has reduced the flow of the Yangtze and Yellow rivers.

Figures by the World Wildlife Fund (WWF) weather station at the head of the Yangtze showed annual rainfall at its source increased from 260 mm during 1991-2000 to 323 mm in the period 2001-06.

"But the increased rainfall didn't lead to more water flow in the rivers because the evaporation was so fast as a result of global warming," Li Shijie, a researcher with the Nanjing institute of geography and limnology under the CAS, said.

Another WWF study showed global warming has caused glaciers to shrink, frozen earth to melt, grasslands to turn yellow and rivers to dry up.

The Qinghai-Tibet Plateau used to boast 36,000 glaciers covering an area of 50,000 sq km. In the past 100 years, their area has shrunk by 30 percent.

### **Climate change is reshaping global politics**

July 17 (China Daily) --United Nations Secretary-General Ban Ki-moon wrote an opinion column titled "A Climate Culprit in Darfur" in the June 16 issue of the Washington Post. In that article he linked the Darfur issue in Africa with climate change and called for more attention to be paid to environmental issues in that part of the world, saying they had spurred the bloody conflicts in the Darfur region.

In the past 20 years, Ban wrote, western Sudan and neighboring countries have been suffering from decreasing rainfall and spreading

desertification, which have brought water and food scarcity to the fore. As a result, violent conflicts between local farmers and nomads have broken out and escalated. Before we knew it, the situation in Darfur had developed into an enormous human tragedy. Ban also noted that environmental issues were partly to blame for internal conflicts in such impoverished countries as Somalia, Cote d'Ivoire (Ivory Coast) and Burkina Faso.

There have been examples of human conflicts caused by climate change in other parts of the world as well.

Since the late 1980s, environmental problems have negatively affected world politics, and with growing severity. Finally, a multilateral agreement on international climate control was born in 1997 in the shape of the Kyoto Protocol. In the ensuing decade, individual nations and the world community at large have been bickering about climate change and its consequences. More and more non-government organizations (NGO) have joined the chorus of voices hoping to raise awareness of the worsening problem and the long-term challenge it poses.

Though there are still groups and individuals in the United States and Europe that refuse to recognize the science of climate change, the European Union (EU), the US and the United Nations (UN) have nevertheless come to terms with this reality. To China, it makes no sense to deny the fundamental facts.

The birth of the world's first atomic bomb can be seen as one of the key factors influencing world politics since 1945. However, the impact of global climate change on world politics could prove more significant than the invention and possible proliferation of nuclear arms. Global warming will continue, while the complicated politics of climate change will become an issue affecting all individual lives.

The causes of global climate change include:

The unprecedented expansion of the global economy. Most of the "greenhouse gases" in the atmosphere today were discharged by developed countries over the past few centuries. However, toward the end of the last century, some populous nations, such as China and India, finally joined the global economic system, which means these countries will soon find themselves in the ranks of major greenhouse

gas-discharging nations. A fact we must remember is that Western countries and industrialized Asian nations like Japan and the Republic of Korea have moved many of their factories to developing countries such as China and India, where cheap labor allows them to manufacture at lower costs than at home. This globalization of production has resulted in the discharge of much more waste in poor nations that otherwise would have been released in developed countries. As a matter of fact, not all of the greenhouse gases released "in China" or "from China" are really "China's".

Many developing countries, for various reasons, have pursued economic growth in pure money terms and allowed "development-ism" or "development-first" philosophy to dictate their decision making processes, resulting in decades, if not centuries, of neglect or ignorance of environmental problems and indifference to or an inability to deal with them.

With a population of only one-fifth of China's, the United States is the top consumer of natural resources and the leading waste producer in the world. It has benefited the most from economic globalization and developed a production style and life-style based on indiscriminate and care-free consumption of the world's resources. This "American" production style and lifestyle have spread to the rest of the world, thanks to globalization, like a contagious disease, especially in the non-Western world: Go to any non-Western corner of the world and one will see copied, cloned or even blown-up versions of the American style.

Global climate change has been accompanied by political conflicts in the world. In the US, for instance, interest groups such as oil and automobile conglomerates have done their best to block the adoption of measures to deal with climate change for years. Within the "Western bloc", the fact that the US and Europe have been at loggerheads over this issue is no secret.

Similar disputes have also been raging between developed and developing nations. For example, both the Democrats and Republicans in the US Congress routinely paint China as the key to solving the problem of global climate change rather than America itself. But the truth is that China lags far behind the US in terms of per capita greenhouse gas discharges, though it is second to the world's largest economy in terms

of the total volume of carbon dioxide released every year.

From European Union nations (such as Britain and Germany) to the US (especially the Democrats) and the G8 group, global climate change has become a priority in developed countries' internal and international politics, and fierce disputes have raged. In sharp contrast, this issue has yet to become a priority in the domestic and foreign policies of many developing countries, including China and India, where the experience of climate change has been more traumatic than in Western nations.

Ironically, challenges and tragedies such as Darfur are not all that climate change has brought, meaning not all the news about climate change is bad. To some countries (governments), communities and international groups it also presents lots of opportunities, which is good news. Because the impacts of climate change on different countries, regions, communities and various interest groups are different, the politics of climate change is more complicated than many people think.

This writer has envisioned and predicted some short-term and long-term impacts or consequences of global climate on world politics:

First of all, as the world's largest and most developed economy, responsible for the most greenhouse gas discharges on both an absolute and per capita basis, the US remains at the center of this issue. The progress of negotiations aimed at preventing climate change from worsening will depend on the attitude, policies and strategy of the US government and society.

Second, climate change will impact geopolitics and the wellbeing of nations. Some will find themselves struggling for survival. Deserts expand with no respect for national borders. Some countries may see their national strength devoured by an endless sea of sand. The continuing desertification of Mongolia, already home to one of the biggest deserts in the world, is posing a grave threat to Northern Asia and especially China. The expanding Sahara Desert in Africa has already buried many a native kingdom. Darfur is but another tragedy unfolding in its wake. While landlocked countries endure the onslaught of deserts, many "maritime nations" are at the mercy of rising sea levels and torrential rain.

The picture in China is just as gloomy, if not more so. With its extremely vulnerable geological system and worsening environmental ills (nearly 30 percent of the country's land area has become desert while water pollution is threatening people's lives), the goal of achieving a peaceful rise is certainly becoming more difficult for the great nation to attain. It must be noted that serious pollution has already complicated China's foreign relations.

For some other countries, like Russia and Australia, climate change may help beef up their national strength. As two major territorial powers, these two countries could see much of their land become suitable for development thanks to climate change. Russia will become a new superpower with enormous resources at its disposal.

To realize this ambition, Moscow is building on its resource advantages, while the West frets over the prospect of Russia influencing world politics with its natural resources arsenal.

Third, different countries will adopt different policies, laws and educational approaches according to their own understanding of climate change, strategies and control capabilities. Some countries, developed European countries in particular, should be able to weather the challenges presented by Mother Nature because they have done their homework and are well prepared. They may even benefit from climate change at the end of the day. But countries that have continued to ignore all the warning signs will most likely find themselves in dire political straits come judgment day.

Fourth, climate change may give nations a reason to regroup. Whether or not we care to admit it, climate change is a prominent factor in how the nations of the world today weigh the merits of various new alliances. European countries are moving closer together these days to deal with climate change, which has, in its way, strengthened European unity. It has also been behind regional cooperation in other regions. The G8 Group will probably see more conflicts among its members over the issue, such as between the US and EU or Russia and the EU. They will also have to commit to better coordination over climate change. China will no doubt feel similar effects in its relations with the rest of the world because of climate change.

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### **China's vital wetlands shrinking due to climate change**

July 17 (AFP) -- Climate change is shrinking wetlands on China's huge Qinghai-Tibet plateau that are vital to regulating the flow of the country's giant rivers, state media reported Monday.

The contraction of the wetlands has already led to reduced flows of the Yangtze and Yellow rivers, the China Daily newspaper said, citing a recent study.

Wetlands on the plateau have shrunk more than 10 percent overall in the past 40 years, with wetlands at the Yangtze's origin contracting an alarming 29 percent, said the report by scientists from the Chinese Academy of Sciences.

About 17.5 percent of the small lakes at the Yangtze's source also have dried up, it said.

"The wetland plays a key role in containing water and adjusting the water volume of the rivers," said Wang Xugen, a researcher with the academy.

"The shrinking of the wetlands on the plateau is closely connected with global warming," Wang said.

Wang added that even though rainfall in the region was increasing due to climate change, water flows in the rivers had not increased due to faster evaporation caused by the higher temperatures.

The report is the latest sobering indication of climatic change on the plateau, a source of several of Asia's biggest rivers, which scientists say could have a severe impact on the sustainability of water supplies in the region.

Recent studies have found rising temperatures and alarming rates of glacial retreat.

Last week, state press quoted another study as saying massive glaciers in northwestern China's Xinjiang region have shrunk by 20 percent while snow lines have receded by about 60 metres (200 feet) since 1964.