Research and Environment News from China

February 8 - February 2005

Please note that the previous newsletters can be downloaded from the Website of the Embassy of Switzerland in China: www.eda.admin.ch/beijing . To *subscribe/ unsubscribe or send us your comments, please send an eMail with the coresponding subject to* ziwen.zhu@eda.admin.ch.

Introduction

The topic this month was the Kyoto Protocol in China the same way as around the world. This international treaty aiming at curbing emissions of greenhouse gases went into effect on February 16 2005. China ratified the Protocol in 2002, but is not immediately obliged to any reduction of emissions. However, it is likely that China will prepare itself actively over the next few years. Right now, for example, the first international CDM project in China is prepraring itself.

But even more significant this month was the show of muscle by State Environmental Protection Agency of the Central Government. As described in the last Newsletter, its move to close down 30 large-scale projects across the country is regarded as an "environmental protection storm", which reflects that the Chinese government has begun to use environmental protection as a method to cool down the economy and will pay more attention to environmental management for any new projects. Subsequently, SEPA has threatened 46 power plants of closing and fined the Three Gorges project. Even if there is discussion about who is behind this show of power, what is sure is that it was a success and should have a positive impact on the respect of laws and standards around the country.

Science & Technology

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4. Chinese scientists to build first wave power station	*wave power*
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6. Overseas capital taps biotech industry	*acquisit Chinese biotech firm*
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Environment

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5. China Under Pressure on Emissions as Kyoto Looms	*cut emissions pressure*
6. SEPA stops power plants to prevent overcapacity	*suspend project，environmental law*
7. Green law suspends US$billion schemes	*SEPA suspended large projects*
8. SEPA TAKES A STAND ON ENVIRONMENTAL PROTECTION	*suspend project violating environmental law*
9. China blacklists 46 thermal power plants for threatening environment	*environmental protection*
10. All 30 law-breaking projects suspended	*environmental law，suspended projects*
11. Three Gorges firm fined for flouting environment law	*environmental law，penalty*
12. China underscores agriculture, ecological protection in western development	*western development ecological protection*
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14. China sees fast growth of oil/gas reserves last year	*oil exploration*
15. China's energy demands may ease in 2005	*energy demand, economic growth*
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17. Goliaths compete for nuclear plant pact	*nuclear units construction*
18. Shandong, Jilin opting for nuclear power plants	*nuclear energy*
19. China to beef up surveying of mineral resources home and abroad	*mineral resources*
20. Nation seeks energy efficient buildings	*ecological , environmental protection*
21. China continues to face electricity shortage in 2005	*electricity shortage*
22. Chongqing achieves remarkable progress in environment	*environmental protection progress*
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24. Chinese wind farm project set to request CDM registration	*CDM project registration*

Health

	KEYWORDS
1. **Official: No need to feel panic about meningitis**	*meningitis*
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3. **Harbor for HIV/AIDS carriers built in Shanxi**	*HIV/AIDS treatment*
4. **Does SARS virus still exist in the wild?**	*SARS*
5. **Chinese lawmakers call on sever punishment on revealing sex of fetus**	*revealing fetus sex illegal*
6. **China draws up crisis countermeasures**	*crisis countermeasures*
7. **Watchdogs go after malignant red dye**	*ban on cancer-causing dye*
8. **New Bird Flu Vaccine Developed**	*avian Vaccine*

Activites coming up soon

March 1, 2005
The 1st Int'l Conference on Technologies of Intelligent and Green Buildings and the 1st Int'l Expo on Technologies and Products of Intelligent and Green Buildings
City: Beijing
Contact: Mr.Linyong , Tel: 010-68394535 Fax: 101-68394530
March 18, 2005
The 15th International multi-subjects biology material research seminar
City: Shanghai
Contact: Mr.Songyang, Tel: 021-63267373 Fax: 021-63584450
March 22, 2005
China (Shanghai) Int'l Expo for Water Supply Technology and Equipment 2005
City: Shanghai
Contact: Ms. Meng Yining, Tel: 021-52895151ext.128 Fax: 021-52895263
myn@stcec.com
March 23, 2005 - March 25, 2005
the 5th China Int.Electric Power Equipment& Tech Exhibition
City and Venue: Shanghai Exhibition Center, Shanghai, China
Tel: 86-21-54592323*332 Fax: 86-21-54253480
Email: Stanley@zhongmao.com.cn
Website: www.epetee.com
March 28-30,2005
The First Green Building Conference
City and Venue: Beijing International Convention Center
Tel: +86 10 68394771 68393584 Fax: +86 10 68393584
E-mail: dost-moc@mail.cin.gov.cn
March 29-31,2005
Water & Membrane China (Shanghai) 2005
Venue:Shanghai Exhibition Center, Shanghai, China

Contact: Julius Zhu, Grand Exhibition Services Co., Ltd.
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Cell: +86-13901048399
Email: julius@grandexh.com / juliuszhu@vip.sina.com
Web: http://www.grandexh.com/
April 5, 2005 - April 7, 2005
The 5th China International Petroleum & Petrochemical Technology & Equipment Exhibition
City & Venue: Beijing Exhibition Center, Beijing, China
Tel: 0086-10-88414751, 68488273 Fax: 0086-10-88414752
Email: zw-sophia@china-zhenwei.com.cn
Website: www.cipe.com.cn
April 20-22, 2005
The 6th China International Water Supply and Drainage and Water Treatment Technology and Equipment Exhibition
Venue: Shanghai Everbright Convention and Exhibition Center
Contact: zmes@zhongmao.com.cn http://www.wsdwtf-sh.com
April 20-22, 2005
The 6th China International Environmental Protection Technology and Equipment Exhibition
Venue: Shanghai Everbright Convention and Exhibition Center
Contact: Zmzl@sh163.net http://www.eptee.com
May 25-27, 2005
The 2nd China International Renewable Energy Equipment and Technology Exhibition and Conference
Venue: Beijing International Convention Center
Contact: qyic@163.net qyic2004@vip.bbn.cn qyic2005@vip.bbn.cn
Tel: 86-10-64290047, 64291832
Fax:86-10-84255706
June 5, 2005
The 9th China Int'l Environmental Protection Exhibition and Conference-CIEPEC 2005
City: Beijing
Contact: Mr.Zhu Qinxue, Tel: 010-68394581, Fax: 010-68393748
Caepi@public3.bta.net.cn
June 2005
2005 China International Nano Science and Technology Seminar
City: Beijing
Contact: Tel: 010-62652123 Fax: 010-62653690 wangqx@iccas.ac.cn
September 25-29, 2005
7th World Congress on 3R (with Exhibition)
Venue: Beijing Friendship Hotel
Contact: Prof.Dr.Huizhou Liu
Tel: 86-10-62554264 Fax : 86-10-62561822
Email : hzliu@home.ipe.ac.cn
September 26-28, 2005
The 2nd Internatinal Conference and Exposition on the Modernization fo Traditional Chinese Medicine
Venue: Chengdu
Contact :http://www.icetcm.com/en/index.aspx

Environment-related international tenders and investment opportunities:

211.147.20.16/bizchina/bidding.shtml

english.cepi.com.cn/homepage

Science & Technology

China's home handset maker unveils new mobile phone technology

(People's Daily On line, 2005-2-4)

Ningbo Bird, China's leading handset maker, recently unveiled a self-developed fingerprint-identification smart phone which is expected to take the market share of its imported counterparts over two to three years, Friday's China Daily reported.

The smart phone, the first of its kind in China, was jointly developed by Bird, the Institute of Automation of the Chinese Academy of Sciences and Beijing-based Digital Fingerpass Technology Co Ltd. The phones also use Bird's self-developed embedded operating system.

The fingerprint, as a highly individual feature, is considered reliable enough to ensure information security, which makes the new technology very promising for e-business and e-government.

"As a self-developed technology, it will be particularly useful to e-government, which demands information security," said Jin Guangtao, Bird's vice-president.

The product will soon go into mass production, he added.

According to Zhao Jiandong, Bird's chief engineer, the company is the third in the world to develop such a phone.

The new model makes secure not only information stored in the phone itself, such as address books and messages, but also various wireless services accessed through handsets such as e-banking, e-shopping and online securities trading.

"Companies in South Korea and Japan developed fingerprint smart phones earlier, but their technology only enables the system to protect information stored in the phone," Zhao said.

China is the world's No 1 mobile phone producer, but most Chinese handset makers have no intellectual property rights (IPRs) to core technologies.

"But Bird has IPRs to two core technologies, and that is encouraging," said Ni Guangnan, an academic from the Chinese Academy of Sciences. He was also a member of the technological appraisal team for the new product.

So far Bird is the only Chinese handset maker that has developed an embedded handset operating system with intellectual property rights.

The company's domestic shipment of smart phones reached 500,000 units last year, with an estimated sales revenue of 1 billion yuan (120 million US dollars).

Medical research on stem cells to continue

(China Daily, 2005-2-21)

China is to maintain its opposition to human reproductive cloning, but will continue to allow closely monitored embryo stem cell research for the treatment and prevention of disease, a senior Chinese expert said yesterday.

"Therapeutic cloning opens up prospects for the replacement of dead stem cells and will improve the health of individuals and mankind as a whole," said Wang Hongguang, president of the China National Centre for Biotechnology Development.

Wang told China Daily that China's technology in embryo stem cell research is currently taking a leading role among developing countries and "several products in the field of skin are facing clinical examinations now."

However, Wang said, compared with developed countries, China still has a long way to go.

China's stance on human cloning was reiterated after the United Nations became divided over the life-and-death question - whether human beings should be cloned in the name of medical research - over the weekend.

The Legal Committee of the United Nations passed a declaration banning all forms of human cloning that were contrary to human dignity on Friday night.

Two competing views of the issue maintain different aspects of the United Nations declaration.

Against the declaration are 35 countries including China, Belgium and Britain that believe limited cloning is helpful.

All have expressed their willingness to continue therapeutic cloning.

Seventy-one supporters of the declaration include Honduras, the United States and Germany.

Chinese representative Su Wei said that the wording of the declaration was vague and the banning of all forms of human cloning contrary to human dignity may be misunderstood as covering therapeutic cloning, Xinhua News Agency reported.

The Legal Committee has been discussing the issue of human cloning since 2001.

The committee at the end of last year avoided a divisive vote on the question of an international convention against human reproductive cloning by deciding to take up the issue again as a declaration.

Stem cell-based therapy enters clinical trials

(China Daily, 2005-2-2)

Chinese scientists have succeeded in moving stem cell-based therapies from laboratories to clinical trials in an effort to help leukaemia and other patients suffering from severe diseases.

An injection of primitive mesenchymal stem cells developed by Chinese scientists has gone into the first phase of clinical experimentation, Zhao Chunhua, a professor with Chinese Academy of Medical Sciences, said at a news conference yesterday in Beijing.

Zhao said scientists are also working hard to apply stem cell-based therapies to pre-clinical trials for treating coronary disease, diabetes, liver failure and other severe cases, thus paving the way for commercializing stem cell medical products, Zhao said.

Pathological damage or malfunction of tissue organs are a major threat to human health. Traditional clinical therapies, including medications, organ transplants and other methods have proved far from effective to full recovery of such patients.

Stem cell-based therapy, focu-sing on repairing damaged or malfunctioning tissue organs, is expected to greatly upgrade the efficiency in treating such serious cases, according to Zhao.

The human body is something like a "cell world" consisting of 1,000,000 billion cells in more than 200 kinds of different tissues. Those cells derive from stem cells with high potential in reproductive fission.

Therefore, how to obtain fission-prone and pluripotent stem cells of multiple-tissues and how to develop techniques for making ex-body stem cells in order to treat malignant tumours and other severe diseases have become a hot topic in stem cell research, according to scientists.

Zhao's research team has isolated potent stem cells from bone marrow, that can be induced and then fuse into various tissue cells in a given body environment, so as to help patients repair and renew organisms.

Zhao said the first phase of clinical experiments will conclude in three months. "If everything goes well, we will summarize the experiment and march towards the second and third clinical trials, hopefully in a year," said Zhao.

Zhang Mu, an official with the Biological Technology Centre of the Ministry of Science and Technology, said: "Whether this breakthrough of stem cell-based therapies are successful or not, depends on clinical effects."

Ministries of health, and science and technology are stipulating regulations to ensure an effective use of stem cell-based therapies within an ethical code, said Jia Jingdun, an official of the Ministry of Science and Technology.

Chinese scientists to build first wave power station

(China Daily, 2005-1-25)

Chinese scientists are working on the world's first wave power station, which can supply a small coastal village with electricity.

During an interview Monday, You Yage, chief scientist for the Ocean Energy Division at the Chinese Academy of Sciences Guangzhou Institute of Energy Conversion, said his research team recently completed a test for the most advanced wave power system.

With a patented technology on energy-storage manostat, the Chinese researchers are leading the world in developing a stable electricity flow generated by waves, You said.

You said the test met technical expectations and is shock resistant and stable. The generator produced about six kilowatts, better than diesel generators with similar capacity.

This equipment could be used for electricity for light, computers, air conditioners and sea water desalination, the scientist said.

He said the wave power is one of the most unstable powers in the world. British and Portuguese scientists are now researching on building effective wave power stations. But they have failed to reach technical expectations.

You estimated that by 2005, his team could build a complete wave power station with advanced technologies. But he was not upbeat on the large-scale commercialization of this equipment in near future.

The research done by the CAS Guangzhou institute is financially supported by the Ministry of Science and Technology under its state high technology research and development project as well as the CAS funds for strategic research.

Scientists worldwide have been considering using waves to generate power. They thought that the unending waves could provide humans with an endless power supply. However, the current technology for such wave power stations is expensive and hard to maintenance.

According to You's estimation, a small station with a total generation capacity of 50 kilowatts could produce 26,300 kwh in a year, which could sufficiently supply electricity for a seaside town with fewer than 240 families in residence.

New technology to dispose of sewage, mud developed in China

(People's Daily On line, 2005-2-21)

Chinese scientists have developed a technology that can effectively turn sewage water and mud, two main headaches of urbanization, into organic fertilizer and high value pesticide.

The closed microorganism aerobic fermentation technology, developed by a research group headed by professor Chen Liqiao of the Shanghai-based Huadong Teachers' University, has passed a technical appraisal by experts of the Shanghai Municipal Science and Technology Committee recently.

Experts spoke highly of the technology, saying it can remove the odor of sewage and mud, and turn waste into resources.

Experiments by the Shanghai Sewage Water Treatment Plant show that disposing of mud with the new technology can generate 150 yuan (18.13 US dollars) per ton.

Currently, China's sewage treatment plants discharge more than nine million tons of mud annually and the figure is rising by an average 10 percent year on year.

Two methods are now used to deal with increasing urban sewage water and mud in China: incinerating and burying underground.

Overseas capital taps biotech industry

(China Daily 2005-1-20)

Liu Pei has been living with an uneasy feeling in recent days.

His company, Shanghai-based Bio Asia, was acquired on December 8 by California-based biotech reagent giant Invitrogen Corp. The deal has left him of two minds.

"On the one hand, we are losing a company of our own, which we have struggled to build over the past five years," Liu, general manager of Bio Asia, told China Business Weekly.

"On the other hand, the acquisition will improve the technological level and service provision of Chinese biotech companies, such as Bio Asia. It will certainly prompt more international biotech giants to invest in China."

Invitrogen paid US$8 million to acquire Bio Asia, a research equipment and reagent firm that has 18 sales offices across China. Liu will become Invitrogen China's national manager.

The deal marks the **first major acquisition of a Chinese biotech firm by an international rival**. Analysts and industry insiders suggest the deal proves foreign firms are interested in researching, developing and producing biotech products in China.

"Several leading US biotech companies have been seeking Chinese partners for new business, from outsourcing research to forming joint ventures," Wu Jun, executive vice-president of Shanghai Genomics Co Ltd, told China Business Weekly.

"They have come to China not only for the emerging huge market, but also for the **improving management and innovation** of local firms."

Greg Lucier, Invitrogen's chairman and chief executive officer, said, on the company's website: "The **rapid growth** of China's biotech and medical research industries, and the major WTO (World Trade Organization) change opening the market to international companies, add fuel to Invitrogen's already-robust commercial potential in the country."

Demand in China for biotech equipment and reagents has increased rapidly in recent years.

The Chinese Government **increased its biotech funding 400 per cent** between 2001 and this year, to reach 10 billion yuan (US$1.2 billion).

Numerous massive projects - including rice gene sequencing and human liver proteomic initiatives - have been launched in the past three years.

Privately owned biotech firms in China are playing a greater role in the process.

For example, Shenzhen SiBiono GeneTech developed Gendicine, the **world's first commercialized gene therapy medicine**.

Post-WTO China, greater innovation, improving technology and high-quality, but less-expensive, workers are attracting both biotech equipment and biopharmaceutical firms to China, said Matthew Chervenak, president of General Biologic Management Consulting.

The report "Pipeline China 2004," published last October by General Biologic, estimates **60 biological drugs** - including 19 antibodies and 11 vaccines - were being developed, independently, by Chinese biotech firms.

Previously, Chinese biopharmaceutical companies only produced generic drugs, such as EPO and Insulin.

China's WTO entry, in December 2001, also resulted in smoother access by foreign firms to China's biotech sector, said Mark Tang, managing partner of New Jersey-based World Technology Ventures.

In its 2002 and 2005 editions of the "Catalogue for the Guidance of Industries for Foreign Investment," China listed biotech research, development and production as **preferred sectors for foreign investment**.

The Chinese Government last October released a policy aimed at simplifying foreign investment procedures.

Last December, three years after it joined the WTO, China allowed foreign firms to sell pharmaceutical and biotech products directly in China.

Since joining the WTO, China has revised its intellectual property rights (IPR) laws, so they are consistent with rules of the Trade-related Aspects of Intellectual Property Rights (TRIPS), and has enhanced enforcement of IPR laws and regulations.

Despite foreign firms' attraction to the Chinese market, most analysts say it is too early to say with any degree of certainty that foreign biotech companies have launched a wave of mergers and acquisitions (M&A) in the country.

Many international biotech firms considering entering China remain concerned about the nation's **poor implementation of IPR-related laws**.

"For biotech firms, IPR may mean everything. They are very cautious about making massive investments in China," said Chervenak.

Foreign biotech companies are also hesitant to invest in China because they have little understanding about the ongoing innovation in the country's biotech sector.

Although China's biotech firms have become significantly more innovative, their ability to ensure their research capabilities are on par with foreign firms remains a challenge, Wu said.

Cheng Guoxiang, president of Shanghai Genon Bio-engineering Co Ltd, said the biodrug development process is lengthy - and risky. Foreign companies cannot easily move their research teams to an unfamiliar country.

Zhang Luyang, a finance professor at Fudan University, said China's investment environment must be improved before there will be a significant number of foreign M&As within the biotech sector.

Currently, access to financing is quite limited and intermediary services are lacking, which indicates foreign and Chinese firms do not sufficiently know each other.

That is a major challenge for foreign firms conducting research in China, Chervenak said.

"Outsourcing research to Chinese firms or launching research programmes with Chinese partners remain rational choices for international biotech firms," Wu of Shanghai Genomics said.

Rising emission may make grain less nutritious: Chinese scientist

(People's Daily On line, 2005-2-21)

A Chinese soil scientist has warned that rises in global carbon dioxide emission may make grainless nutritious -- the protein level in cereal, for example, may be lowered by 10 percent in the coming four decades.

"With higher density of greenhouse gas, plants will breathe in more carbon dioxide and grow faster -- but not necessarily better," said Zhu Jianguo, a researcher with the Nanjing Institute of Soil Science, a branch of the Chinese Academy of Sciences.

Song's institute teamed up with a Japanese institute of agricultural environmental technologies in 2001 for a joint research program on how higher carbon dioxide density in the coming decades may affect the cropland ecosystem in Wuxi and Jiangdu cities of east China's Jiangsu Province.

The scientists simulated a closed agricultural environment with increasingly higher density of carbon dioxide, and by the time the emission reached the level forecast for 2050, rice in the field had grown 10 to 14 percent faster than normal and wheat, 12 to 20 percent, said Song.

"Higher density of carbon dioxide is like a 'gassy fertilizer' that speeds up their growth, but shortens their growth period, too, by an average six to nine days," said Song, who is chief scientist for the three-year research program. "As a result, the grain becomes less nutritious, with contents of protein, amino acid and trace elements such as iron and zinc all declining."

He said these changes might impact China's soil as well as its grain quality and food security. "With more carbon dioxide inhaled, the rice may appear whiter and taste more glutinous, but you might feel hungry again two or three hours after a full meal because the actual intake of necessary nutritious elements has dropped".

Song welcomed the Kyoto Protocol that came into effect on Feb. 16, noting it marks mankind has finally taken a decisive step forward to safeguarding the planet by curbing global warming.

Experts have warned time and again that the warming climate can cause the sea level rising, glaciers shrinking, desertification accelerating and biological diversity lessening. Livestock husbandry also bears the brunt as certain species, particularly insome alpine and polar regions, could be endangered with extinction.

China-designated alleles reach ten

(People's Daily On line, 2005-2-21)

News from Jiangsu Provincial People's Hospital says that the HLA Laboratory in the hospital has discovered and identified three novel HLA (human leukocyte antigen) alleles. They have been attested by the gene bank of the US National Institutes of Health and have obtained the official designation by the WHOHLA Designation Committee. It means that new codes have been added to the human "genetic ID card". Among the 1,800-odd alleles discovered so far by human being those discovered and identified by Chinese have increased to ten.

As learned the discovery of these three novel alleles not only enriched the storehouse of human genetics, but also provides more chances for the study of relevant diseases such as the search for HLA-matched suppliers in Hematopoietic stem cell transplants and the healing of patients with malignant blood diseases.

Experts Speak on Therapeutic Cloning

(China.org.cn by Shao Da, February 22, 2005)

A deeply divided UN legal committee adopted a non-binding resolution on February 18, calling on world governments to ban all forms of human cloning. Thirty-five countries, including China, Belgium and Britain, voted against the declaration.

Therapeutic cloning is the focus of the debate. Chinese representative to the committee Su Wei said that the wording of the declaration is vague and the prohibition on "all forms of human cloning inasmuch as they are incompatible with human dignity and the protection of human life" might be misunderstood as including therapeutic cloning.

Therapeutic cloning refers to the cloning of human embryos to obtain stem cells for research. Opponents to the procedure claim that a zygote formed in asexual reproduction is already a living being whose rights should be safeguarded.

He Zuoxiu, a theoretical physicist and academician from the Chinese Academy of Sciences (CAS), published an article as early as in 2002 titled Supporting Human Cloning Research in a Cautious Way. The piece set off a heated nationwide debate.

"The heart of the matter lies in the conflict between cloning of human embryos for medical research and the patients' interests," said He in an interview with the *Beijing News* on Sunday. "An individual zygote has no sensory function or nervous system, thus it is difficult to regard it as a 'true' human being. Protecting the rights of a 'nonhuman' at the expense of millions of invalids who might be cured as a result of therapeutic cloning, -- I would call it a practice detrimental to social progress."

Technically speaking, He noted, therapeutic cloning is more complicated than reproductive cloning and involves more ethical issues. To avoid unnecessary conflicts with countries such as the United States that advocate an overall ban on cloning technologies, China has adopted a policy of supporting therapeutic but opposing reproductive cloning.

Li Sun, an ethics postdoctoral researcher at the Philosophy Institute of the Chinese Academy of Social Sciences, said that so far neither advocates nor opponents of therapeutic cloning have established strong foundations for their positions.

International practice allows the use of an embryo within 14 days of fertilization for research purposes, on the basis that it has not been able to form an individual being. But the 14-day rule does not hold up well under close scrutiny. Various countries and cultures in fact have widely variant views on whether or not embryos are entitled to human rights, according to Li.

In his opinion, the only valid reason against human cloning is the immature state of current technology, not human rights considerations.

Animal cloning still remains at an experimental stage. Indiscreetly applying that technology to human beings is a scientific as well as a moral problem, Li said.

Duan Enkui, head of the CAS Institute of Zoology, said on Sunday, "Therapeutic cloning is conducive to solving the difficult problem of immunologic rejection." He stated that the Chinese government has given explicit backing to therapeutic cloning research within legal and ethical bounds to save people's lives.

China has been active in developing cloning technology. The birth of Weiwei, a female calf, in Caoxian County, Shandong Province, on January 18, 2002, marked the first successful cloning experiment conducted independently by China. Unfortunately, Weiwei died the following day.

Beijing's first cloned calf, Shunhua, was born at a cattle farm in Shunyi District on October 26, 2002.

TrendChart Newsletter

(Tekes News, 2005-1)

Finland: Finland enhances co-operation with China and Japan in the field of innovation

Finnish technology and innovation policy actors are investing in enhanced cooperation with China and Japan. In particular Tekes, the National Technology Agency of Finland has actively strengthened its networks and presence in both countries.

A good example of the intensifying co-operation is a new pilot, FinChi Innovation Centre which will be launched in Shanghai, China at the beginning of 2005. The main goal of the Centre is to establish a two-way channel to support co-operation between Finland and China. The FinChi Innovation Centre will provide assistance for Finnish growth orientated companies planning to enter the Chinese market/co-operate with local partners. The Innovation Centre will also promote Finland as an attractive technology investment destination for Chinese investors. The FinChi Innovation Centre will be an additional step in building up a platform supporting Finnish business in the fast growing Chinese market. In August 2004, Tekes established a permanent office in Beijing.

In April 2004, Tekes signed a co-operation agreement with NEDO, the New Energy and Industrial Technology Development Organization of Japan. NEDO is the main R&D funding agency in Japan. Tekes and NEDO have had mutual co-operation for several years. The purpose of the new agreement is to further enhance programme level technology-related information exchange, conduct joint seminars, and provide partnering assistance to delegations visiting Japan or Finland. The objective of these activities is to increase researcher exchange, technology transfer and the number of collaborative technology development projects.

China to Host World Conference on TCM

(Xinhua News Agency February 1, 2005)

Deputy governor of Sichuan Province Ke Zunping said Monday that his province will host an international conference on modernization of traditional Chinese medicines (TCM) from Sept. 26 to 28 in Chengdu, the provincial capital.

Ke said that the scheduled conference will attract lots of world recognized experts in traditional Chinese medical sciences and medicines.

Li Xueyong, vice-minister of Science and Technology, said at a press conference that natural medicines are better and better received by global consumers in tandem with advancement of life sciences.

China should modernize its industry in traditional Chinese medicines, Li said.

The conference will be broken down into sub topics such as high technologies, traditional theories and their latest development, herbal resources and their manufacturing, and clinical appraisal on safety of traditional Chinese medicines, Ke said.

Organizers, including the Ministry of Science and Technology, the Ministry of Agriculture, the Ministry of Health and others, have launched an official website of the conference at www.icetcm.com.

Environment

UN Kyoto Protocol on global warming goes into effect

(Xinhua, 2005-2-16)

The United Nations Kyoto Protocol on global warming went into effect Wednesday with most of the industrialized countries legally bound to control pollution.

The international treaty aiming at curbing emissions of greenhouse gases finally realized its implementation eight years after it was negotiated in Japan's ancient city Kyoto in 1997 by 159 countries and ratified by 141 nations. It is an adjunct to the 1992 UN treaty on climate change.

The pact, known officially as the United Nations Framework Convention on Climate Change (UNFCCC), came into force at 0500 GMT Wednesday or midnight Tuesday in New York, where the United Nations is headquartered.

The protocol targets carbon dioxide and five other gases that can trap heat in the atmosphere, and are blamed for rising global temperatures that are melting glaciers.

The protocol will have legal force for its participants from Feb. 16 after meeting twin conditions -- backing from at least 55 countries and support from nations representing at least 55 percent of developed countries' carbon dioxide emissions.

It passed the second hurdle in November 2004 when ratified by Russia and now has backing from nations representing 61.6 percent of emissions. But the United States, the world's biggest polluter, withdrew from the Kyoto treaty in 2001 with an excuse that the treaty would cause adverse effects on the US economy and wrongly omits developing nations.

The protocol commits the industrialized countries who have ratified it to reduce the amount of six greenhouse gases (carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6)) by 5.2 percent of 1990 levels during the five-year period 2008-2012.

Only 39 countries have target levels for the 2008-2012 period, adhering to the principle set under the UNFCCC that richer countries should take the lead.

Japan is required to reduce its carbon dioxide and other greenhouse gas emissions by 6 percent from the 1990 level.

But local environment experts pointed out that the pact, however, remains a small step, as it covers only a third of total emissions in the world.

Japan is expected to have difficulty achieving its target as its emission of such gases in fiscal 2003, which ended March 31, 2004, was up 8 percent from the 1990 level, the expert said.

The ratification in November by Russia, which accounted for 17.4 percent of carbon dioxide emissions in the base year 1990, paved the way for the pact to come into effect. The pact requires ratification by 55 nations accounting for at least 55 percent of emissions in 1990.

Under a 2001 deal made by environment ministers in Germany, countries overshooting their targets in 2012 will have to make both the promised cuts and 30 percent more in a second period from 2013.

The occasion of the inauguration of the world's first attempt to control climate change was marked around the world.

In Bonn, Germany, the secretariat of the UN framework convention and civic groups will jointly hold a commemorative event.

In Japan, a symposium will be held Wednesday evening in Kyoto, where Kenyan Deputy Environment Minister Wangari Maathai, the 2004 Nobel Peace Prize laureate, is scheduled to give a keynote speech.

According to Kyodo News, UN Secretary General Kofi Annan and European Commission President Jose Manuel Barroso will send congratulatory messages through a video conference system.

In addition, given the expected limited impact of the pact, the Kyoto Protocol supporters are already looking beyond it and have begun discussing post-pact policies for 2013 and onward.

The key issues for the post-2012 steps will include how to win US support for the new policies, and to re-examine the obligations and commitments to curb the greenhouse gas emissions in developing countries, which are exempted from the treaty's obligations.

China continues to cut emissions

(China Daily, 2005-2-17)

China will continue to explore ways to tackle climate change, a senior government official said on February 16 as the Kyoto Protocol came into force.

The 1997 United Nations accord aims to cut greenhouse gases and curb global warming. China ratified the protocol in 2002, although as a developing country it has no specific obligation to cut emissions.

Liu Jiang, vice-minister of the National Development and Reform Commission, said he hopes developed countries will take the lead in implementing the protocol.

And they should help developing countries increase their ability to address climate change, he added.

The United States, the world's largest emitter of such gases, has refused to ratify the Kyoto agreement. The White House on Tuesday defended US non-participation in the protocol, stressing economic concerns.

French President Jacques Chirac on Tuesday urged developed countries to cut more gas emissions to combat global warming.

Russian Deputy Foreign Minister Yury Fedotov yesterday welcomed the fact that the protocol control has come into force, but pointed out that the treaty does not solve all environmental problems related to the climate.

Australia has defended its decision not to join, with Environment Minister Ian Campbell saying the country was nonetheless on track to cut emissions by 30 per cent.

According to the treaty, developed countries have to cut their emissions of greenhouse gases, mainly carbon dioxide, by an average of 5.2 per cent from 1990 levels by 2008-12.

Although China has no specific obligation to cut emissions, it has taken a series of measures to address climate change, Liu said.

It has set up a national co-ordination body, actively participated in international negotiations and carried out campaigns to raise public awareness.

The Chinese Government has also set up an examining committee for the clean development mechanism (CDM), which is a crucial part of the protocol.

Under CDM, developed countries can carry out emission-reduction projects in developing countries through financial and technical co-operation. This counts towards their emission targets.

Liu said the country has so far approved two CDM projects and more are being prepared.

"It is a good thing for China that the protocol has become effective," said Wang Zhongying, deputy chief of the Centre for Renewable Energy Development under the Energy Research Institute of the National Development and Reform Commission.

"The protocol provides new opportunities for China to draw more overseas investment under the CDM arrangement," Wang said.

Yu Jie, of Greenpeace China, said yesterday that there were hurdles to jump if China was to benefit from CDM.

They include the fact that there is little expertise that would enable the introduction of emission-saving technology to Chinese companies, and the awareness about such issues among the country's firms is inadequate, Yu said.

A group of college students from universities in Beijing, calling themselves the "solar generation," yesterday showed their support for the protocol at a celebration held at Jingshan Park in Beijing.

The celebration was part of Greenpeace's global activities to mark the introduction of the Kyoto Protocol.

"We must reduce the use of fossil energy and turn to more renewable energy," said second-year student Bi Mingchao, a volunteer from Beijing-based Capital University of Economics and Business.

The volunteers also wrote a letter to UN Secretary General Kofi Annan, part of which reads: "Climate change is the most serious challenge. Please make sure the UN encourages all countries in the world to take the necessary actions to tackle the problem." Many passers-by at the celebration signed their names to the letter, which will be sent to Annan himself.

Can the world live with China?

(The Observer, 2005-2-20)

Can the planet's environment survive turbocharged economic growth from China?

Last week, the might of the world's most populous nation came into sharp focus. China officially overtook the United States as the world's biggest consumer of agricultural and industrial goods. Meanwhile, its economy - on a steep upward curve for 20 years - surged by 9.5 per cent last year. With compelling evidence that climate change is accelerating, there is growing concern that fast-emerging nations will place an unsustainable burden on the earth's already fragile resources.

Most analysts tend to start from the standpoint that it is unfair to blame China for climate change because the vast majority of emissions have been caused by consumers and businesses in the developed world. And in recent months, the Chinese government has taken environmental concerns more seriously, says Bryan Cress, the CBI's head of east Asia.

Cress visited the country recently with his leader Digby Jones and Trade and Industry Secretary Patricia Hewitt, and is optimistic that Beijing now realises that increasing evidence of river pollution and environmental degradation cannot be ignored. This comes after environmentalists reacted with horror to China's importation of vast supplies of timber: in Indonesia, forests the size of Switzerland are now cleared every year.

Tony Juniper, executive director of Friends of the Earth, says the environment cannot tolerate the demands placed on it by industrialised countries, never mind the accelerating growth of emerging nations like China, India, Brazil and South Africa.

Western countries' addiction to economic growth has to be recast, he says - if not, the consequences will be 'utterly disastrous'.

China is now forging significant alliances with Russia, Venezuela, Sudan and Middle Eastern countries to secure oil and gas supplies. Juniper warns that, quite apart from climate change, with fossil fuel demand set to vastly outstrip supply, the only way the world can avoid war is to find greener alternatives to oil and gas quickly.

But Hannah Reid, climate change research associate at the International Institute for Environment and Development, says American promises to export so-called 'technology fixes' to China to mitigate the effects of industrialisation have failed to materialise. 'The investment is minuscule,' she says.

Global warming boosts comeback hopes for reactors

(Financial Times, 2005-2-8)

China's announcement this week that it will construct what is likely to be the world's first operational pebble-bed nuclear reactor, ahead of the US and Europe, marks a resurgence for the nuclear industry.

Maligned by environmentalists and cold-shouldered by many western governments, the nuclear industry has faced an uncertain future in recent decades.

A handful of high-profile accidents - chiefly, of course, Chernobyl - fuelled fears over the safety of nuclear plants. These were recently reinforced by concerns that terrorists might steal radioactive material or target the plants for devastating attacks.

As a result, many countries have been phasing out nuclear capacity, as power plants reach the end of their useful lives, and have failed to invest in new capacity.

In the UK, the government has deferred a decision on whether to continue with nuclear power. In the US, President George W. Bush has spoken in favour of greater investment, but approval of new plants has been slow in coming.

The Japanese government has faced growing pressure to phase out nuclear plants after a series of minor but well-publicised accidents.

At least two developments have renewed interest in nuclear power. One is mounting concern about the security of oil supplies in the Middle East. More importantly, however, nuclear power is seen as a potential answer to global warming as scientists have warned that the world needs to cut its dependence on fossil fuels that emit greenhouse gases.

Unlike coal and gas, nuclear power does not emit greenhouse gases and therefore offers the potential for continuing energy-intensive ways of life without the associated cost of climate change. A few environmentalists - most famously James Lovelock, originator of the Gaia theory, which states that Earth behaves as if it were a living organism - have even spoken out in favour of nuclear power as a lesser risk than fossil fuels. "Given the risks from climate change and the challenges that face all of the low-carbon and no-carbon supply options, it would be imprudent in the extreme not to try to keep the nuclear option open," said John Holdren, Heinz professor of environmental policy at Harvard University.

However, the nuclear industry requires "concerted efforts to address concerns about cost, susceptibility to accidents and terrorist attack, management of radioactive wastes and proliferation risks".

New technologies make nuclear power appear much safer and cheaper than in the past. The pebble-bed design China is pioneering is one example. The technique uses as fuel thousands of small graphite balls flecked with tiny amounts of uranium, instead of the fuel rods in conventional designs.

With the fuel sealed inside layers of graphite and silicon carbide, the depleted waste is relatively easy to dispose of, at least in theory. The core can be bathed in inert helium, dispensing with the need for superheated water. The helium expands in the turbine, generating power. Pebble beds are considered much safer than traditional designs because the dispersal of fuel means meltdown should be impossible.

However, environmentalists say the design has yet to be proved in practice and that it is unclear how spent fuel would be processed.

Even if nuclear power in the west can win over public opinion, another problem remains. Experts argue over nuclear power's cost. Plants require vast upfront investment and the cost of safeguarding them pushes up the overall bill. Add to that the costly business of dealing with waste and decommissioning the plants at the end of their lives and the sums start to look alarming.

It is difficult to judge whether the plants represent value for money. Public sector investment clouds the picture. France's nuclear industry is often cited as an example of how affordable it can be, but the fact that it is state-owned makes that difficult to ascertain. China's nuclear scheme is another case in point.

Next month, the nuclear industry will try to impress governments at a conference organised by the International Atomic Energy Agency and the French government, co-sponsored by the Organisation for Economic Co-operation and Development.

One technology could erase all debate. Nuclear fusion is the reaction that goes on within the sun, turning hydrogen into helium and producing immense energy. If that reaction could be replicated, nuclear fusion could provide us with limitless and safe power.

However, collaboration on the costly research needed to make fusion power a reality has been slow. The International Thermonuclear Energy Reactor, a joint research project involving governments round the world, has been beset by squabbles over its location.

And even if agreement is reached soon, experts estimate it will be several decades before commercial results emerge.

China Under Pressure on Emissions as Kyoto Looms

2005-2-8

BEIJING (Reuters) - China is the world's second-largest source of greenhouse gases but when the Kyoto Protocol on climate change comes into force next week it will be under no obligation to cut emissions.

It has approved the Kyoto treaty, but along with India has no obligation to cut carbon dioxide emissions during the pact's first phase to 2012, an exemption the United States says is unfair and one of the reasons it walked away from the agreement in 2001.

But analysts say China will come under pressure on its environment nonetheless -- and is likely to respond -- keen to show it is a good global citizen serious about cleaning up its polluting power sector and smoke-belching factories.

"This definitely will have a strong impact on the Chinese government to make some adjustments in their strategy and policy toward climate change," said Yang Fuqiang of the Energy Foundation, which provides grants to Chinese researchers working on energy issues.

Cities in China, the world's most populous nation, are choked by car exhaust and factory emissions. The country relies on coal for 70 percent of its power and is the world's second-largest oil consumer.

Its voracious economy, which grew 9.5 percent last year, is driving ever higher demand for fossil fuels and the burgeoning middle class are buying more cars than ever.

At the rate its economy is growing, China is likely to surpass the United States on emissions by 2030.

"At this moment, if the Chinese government recognizes this as the pattern, it has to do something right now to avoid ... replacing the U.S. as the target," Yang said.

"That would really be political trouble for China," he said. "After the Kyoto Protocol they have no way to say this is only discussion or negotiation, but we don't need any action."

Under the protocol, only developed countries are supposed to cut carbon dioxide emissions by 5.2 percent of 1990 levels. But China and fellow Asian giant India will be under increasing pressure to play a greater part in the pact's second phase in 2012 when signatories are supposed to make deeper cuts.

CHINA'S DILEMMA

With the start of the protocol on Feb. 16 likely to increase international dialogue on the environment, China may try to play a leading role as it seeks to boost its diplomatic profile to match its economic weight.

"I think this will be a great opportunity for China to participate in the dialogue and be a key player, because China will be the biggest emitter that is party to the protocol," said Maria Suokko, who heads the Energy and Environment Cluster for the U.N. Development Program in China.

But the question remains how China can clean up yet keep its export machine on track.

"China will continue to depend on coal for its energy use, so there should be more efforts in clean-coal technologies," said Suokko.

Increasing the use of renewable energy, such as wind, solar power and biogas is also crucial, experts say, but they add that will require technology sharing and the political incentives.

"Scholars and experts should recognize that related departments would wish to sell their technology at a high price. But this is different from a DVD player," said Chen Qing, a former government official who now runs the private South-North Institute for Sustainable Development.

"I hope this technology can be shared more broadly," he said.

The Energy Foundation's Yang says China could consider a carbon tax, which would target coal use, or an energy tax, which would be calculated by heat value and therefore target oil.

The government is also drafting a law that would require power companies to buy electricity generated by green energy sources, state media has said.

Beijing has said it wants to boost the use of cleaner natural gas in power generation to six percent by 2030 from a little over one percent, but it has not introduced incentives for power plants to make the switch.

Still, should China agree to cut emissions during Kyoto's second phase from 2012, analysts say if the political will is there, the government has the strength to make good on its commitments.

"The Chinese government is the most powerful," said Chen. "So I think if China says they will do it, they can really do it."

SEPA stops power plants to prevent overcapacity

(China Daily, 2005-1-20)

Beijing - Environmental authorities in Beijing stopped 30 big construction projects for violating environmental projection regulations and to stop the economy from overheating. Twenty-six of the projects are power plants being planned in 12 different provinces, and were meant to reduce severe electricity shortages, said the State Environmental Protection Administration (SEPA) on Wednesday.

Environmental requirements breaches were the main reason for the ban, said SEPA in a statement Wednesday on its Web site. Some projects might be allowed to resume but others would be cancelled, reported the news agency AP quoting an administration official.

Late last year, SEPA said it was stepping up controls on investment in power plants, because they were launched without the necessary legal approvals. The building spree took off on a local level because of the current shortage of electricity, but when complete China would have too much generating capacity, about 120,000 megawatts, about 30 times the current national generating capacity.

Three of the largest projects stopped by the State Environmental Protection Agency are build by the Three Gorges Project Development Corp., the company responsible for constructing the Three Gorges Dam along the Yangtze River. But many of the other projects listed by the environmental protection agency involve expansion of existing coal-fired power plants.

Officials have said they expect current widespread shortages to ease within a year or two as the current investment will result in capacity exceeding expected demand. But for the time being power shortages persist, both in the hot summer months and currently in the winter.

To increase energy resources China is active in securing all possible foreign energy deals. Canadian Prime Minister Paul Martin's visit on Thursday, is aimed also to reach deals with China on a Canadian oil companies pipeline plan of US$2 billion, reported Reuters on Tuesday.

Recent oil deals with Russia concerning buying part of Yuganskneftegaz would also help China's thirst for oil and natural gas, as reported ChinaBiz last week .

China needs to import substantially more coal in order to cope with an expansion in coal-fired power generating capacity, according to a recent report by investment bank Morgan Stanley.

Ivanhoe Mines Chairman Robert Friedland and Executive Vice President, Exploration, Douglas Kirwin said on Tuesday that the Chinese Ministry of Land & Resources (MOLAR) has approved the transfer of six exploration licences held in the name of the Inner Mongolia Bureau of Geology (Bureau) into Ivanhoe's Yahao joint venture, an 80/20 joint venture between Ivanhoe Mines (80 per cent) and the Bureau (20 per cent).

Coal imports will "double in every two years for the foreseeable future," predicted Andy Xie, an economist with the bank. China's coal imports rose by 69 per cent in 2004 to 19 million metric tons, but this accounted for just 1.0 per cent of coal demand, he said. In 2004, China consumed about 1.9 billion tons of coal, a sharp 20 per cent increase from the year before.

Green law suspends US$billion schemes

(China Daily 2005-01-18)

Projects worth billions of dollars were ordered to cease construction in China Tuesday for violating environmental law.

The Three Gorges underground power plant is among the list of projects which will be banned or halted for violating environmental law. The photo is taken on January 18, 2005. [newsphoto]

China's top environment watchdog Tuesday suspended 30 large projects across the country in an unprecedented move carried out because they had not been approved under the Law on Environmental Impact Assessment, which went in force in 2003.

The State Environmental Protection Administration claims the move demonstrates the central government's determination to stamp out economic growth at the cost of the environment.

The projects, in 13 provinces and municipalities, were mostly involved in generating electricity.

Construction of the projects started before their environmental impact assessment reports were approved, said Vice-Minister Pan yue of the administration.

"We want to warn firms that the environmental impact assessment cannot just be ignored," he said, although many appeared to simply ignore it when designing and building projects.

Zhu Xingxiang, head of the administration's department of environmental impact assessment, said the projects will have to wait until their reports are approved.

Any projects that do not qualify but could be improved will be ordered to before they resume construction.

Those considered beyond improvement will be completely cancelled, Zhu added.

In view of the law, the size of the investments was remarkable, Pan said.

One of the biggest, the Xiluodu hydropower plant in the area bordering Sichuan and Yunnan provinces, along the Jinsha River, a section of the upper reaches of the Yangtze River, involved an investment of more than 44 billion yuan (US$5 billion).

The administration suggests government bodies punish all responsible for the violations, Pan said.

One expert in environmental impact assessment said the administration's move would implement the law better.

But he said the successful handling of the issue needed concerted efforts from local governments and relevant government bodies.

"Although the environment authorities are authorized by the law to suspend such projects, they don't really have the ability to actually stop them," he said.

Usually, construction must get the nod from local governments or government departments.

Environment authorities simply cannot stop offering loans to law-breaking firms, he added.

Pan said government bodies such as the Ministry of Supervision have promised to intervene if help was needed.

President of the non-government organization Global Village of Beijing Liao Xiaoyi said: "It is encouraging for us that the Chinese Government has taken such concrete action."

She said if companies do not pay attention to the assessment or other environmental duties, society as a whole will bear environmental losses.

To halt the 30 projects may affect the growth of the local economy, but it is beneficial in the long run, she said.

Pan attributed the enthusiastic pursuit of economic growth by local governments to the weak implementation of the law on the environment.

"Small energy-swallowing and polluting projects such as smelting and chemical plants, that are banned, are rampantly expanding in some regions, causing a lot of damage to the daily lives and health of local people," he said.

Some local environment authorities and assessment bodies are still not fulfilling their duties.

Public participation is not sufficient, Pan said. Environmental impact assessment in China is currently government-directed, but the government is unable to supervise so many projects.

"To assess single construction projects is not enough to comprehensively protect the environment and achieve a sustainable use of resources," Pan said.

Meanwhile, efforts will be made to push forward the development of the circular economy, which is considered to be the most energy and resource-efficient model.

Pan said public hearings and forums would be held so the public can participate more in environmental impact assessment.

SEPA TAKES A STAND ON ENVIRONMENTAL PROTECTION

(China Concept Consulting Jan 2005)

In a news conference on 18 January, the State Environmental Protection Administration (SEPA) disclosed a black list containing thirty large ongoing projects with a total investment budget of US$14 billion. According to top officials

in SEPA, none of these projects had obtained approval before construction began, violating the Environmental Impact Assessment Law that went into effect September 2003. SEPA, which is rarely heard by the media, claimed that before 25 January, twenty-two of these projects were suspended.

SEPA's move is regarded as an "environmental protection storm" by China's media and reflects the following two changes.

First, the Chinese government has begun to use environmental protection as a method to cool down the economy. Among the thirty disputed projects, twenty-six are related to the expansion of power stations, which falls under China's macro-economic control.

With the rising demand for power around the country, nearly every province has decided to develop its own power generating capability. The current expansion and construction of power stations has been unsystematic; without government controls, construction of power stations will follow the same trend as steel plants or aluminum smelting plants, resulting in low-level redundant development and severe environmental pollution. Therefore, one of the main aims of SEPA's move was to create some kind of macro-control.

The recent measures differ from last year's macro-control policy, which was characterized by administrative directives, land management directives and monetary policy. Environmental protection has become the new method in macro-control, and the government is said to have worked out a roadmap to adopt more technical measures in addition to the existing administrative measures. When compared to administrative directives, technical measures like environmental protection are likely to have a broad and sustainable effect. Also, environmental issues are more likely to attract the attention and support of the public.

Second, environmental management of new projects is likely to become stricter. Among the 30 problem projects, most are large projects. Three belong to the China Yangtze Three Gorges Project Development Corporation, whose projects are usually supported by the central government. Nevertheless, the SEPA has adopted a firm line, stating publicly that they would enforce the Environment Impact Assessment Law, thoroughly inspecting and punishing any illegal project. This unprecedented level of resolve from SEPA indicates they have the support of top-level officials within the central government. SEPA has claimed that both premier Wen Jiabao and vice-premier Zeng Peiyan, who is also vice-director of Three Gorges Project Construction Committee of the State Council, support the move.

The Environmental Protection Administration has always enjoyed the attention and support of top leaders. Due to rapid economic development, environmental pollution and resource infringement has become increasingly severe, threatening China's sustainable development. Therefore, the Chinese government advocates concepts such as "scientific development" and "a recycling economy."

Against this background, the position of the Environmental Protection Administration is naturally elevated. In order to reinforce the implementation of environmental laws, the Administration is strengthening cooperation with the Organization Department and Supervision Department of the CPC Central Committee. It has been reported that environmental protection indicators will be included in the assessment of official performance in 2007, and that accountability systems for principal officials will be introduced into the environmental protection field. These measures will force officials to pay more attention to environmental issues.

The timing of the "environmental protection storm" is also very sensitive. January is the period when each province holds its local People's Congress and makes plans for the coming year. The reason the central government chose this period was to remind local officials not to neglect environmental issues, and reiterate the need for the central government to employ macro-control.

This recent focus on environmental protection reflects a outlook by the Chinese government regarding macro-control and social-economic development. We can expect that the Chinese government will continue its macro-control with varied measures and pursue a more sustainable model of economic development.

China blacklists 46 thermal power plants for threatening environment

(Xinhua, 2005-1-31)

China's environmental watchdog announced on January 27 a list of 46 thermal power plants that posed a threat to the environment because they lacked desulfurization equipment.

The plants, mostly located in Shandong, Henan and Shanxi provinces, are among the 137 desulfurization projects planned in the country's acid rain and sulfur dioxide control regions covering 1.09 million sq km with 39 percent of the nation's total population, said a statement issued by the State Environmental Protection Administration (SEPA).

A SEPA official said the desulfuration projects should have been completed by the end of 20 05 according to the regulations. However, construction on the projects has not even begun.

"If the pollutants discharged by thermal power plants are not effectively checked, the country's air pollution problem will worsen," he said.
Thermal power plants, mostly fueled by coal, are major air polluters in China. Figures from SEPA indicated that in 2003, the plants discharged 11 million tons of sulfur dioxide into the air, accounting for more than 50 percent of the total emission.

Sulfur dioxide emissions in China will reach more than 21 million tons by 2020 if not effectively curbed.
"Urgent measure must be taken to check the discharge of sulfur dioxide and desulfurization equipment must be installed in thermal power plants," said the official, vowing that SEPA will punish those who run against the country's environmental laws and regulations.

The move marked another major step taken by SEPA to help curb the excessive construction of power plants in the country.

On Jan. 18, SEPA ordered the halt of construction of 30 large projects which failed to meet environmental standards.

Twenty-six of the projects are hydropower stations, thermal-power plants and other power projects including two at the Three Gorges area.

The projects were halted because they failed to pass environmental impact assessments according to the country's laws and regulations.

The laws stipulate that all projects must pass environmental impact assessments before they can be constructed. However, many localities regard environmental bureaus as rubber stamps, and go ahead with construction even if the green light is not given.

SEPA pledged that it will sharpen its teeth and take concrete actions fight environmental degradation in the country.

All 30 law-breaking projects suspended

(People's Daily on line, 2005-2-3)

China's top environment watchdog Wednesday announced that all of the 30 law-breaking projects it publicized on January 18 have stopped construction.

The projects, involving billions of US dollars in 13 provinces and municipalities, were accused of starting construction before their environmental impact assessment reports were approved by environmental protection authorities.

According to China's Law on Environmental Impact Assessment, which took effect on September 1, 2003, construction projects should not be started before their environmental impact assessment documents are approved by environment authorities.

On January 24, the State Environmental Protection Administration (SEPA) said construction of 22 had stopped. The series of moves from the environmental authorities were widely dubbed by domestic media as an "environmental impact assessment storm."

But eight, including three hydropower plants of the China Three Gorges Project Corporation, continued. One of the three is the Xiluodu Hydropower Plant along the Jinsha River, a section of the upper reaches of the Yangtze River, which involves an investment of more than 44 billion yuan (US$5.3 billion) and is the biggest among the 30.

Vice-minister of SEPA Pan Yue said in a statement yesterday that the eight have now been stopped and are waiting for approval of assessment documents.

China Three Gorges Project Corporation has submitted environmental impact assessment documents to the administration and stopped its three projects, according to the statement.

Shu Jianmin, director of the environmental impact assessment centre of the Chinese Academy of Environmental Sciences, said the move showed a strengthening of law enforcement.

It is not that the companies do not have an awareness of environmental protection, Shu said, adding that it was just a matter of compliance.

Liao Xiaoyi, president of the non-government organization (NGO) Global Village of Beijing, said she was "delighted" at hearing the news.

"The storm does take effect at last," she said, adding that she had doubted if the 30 projects could be stopped because they are all large ventures.

Liao said that public participation in environmental impact assessment should be reinforced, too.
In another development, the SEPA and the National Development and Reform Commission have together issued a notice on pushing forward environmental protection during the building of hydropower plants.
According to the notice, some products start construction without environmental protection facilities, causing soil erosion, while others cause negative impact on the ecology of the lower reaches due to defects in design and operation.

Great importance should be attached to the environmental impact assessment of hydropower development plans, the notice said. Hydropower projects should also take concrete environmental protection measures.

Zhang Jianyu, a visiting scholar at the Tsinghua University's School of Public Policy and Management, said it was practical for the two government bodies to jointly issue such a notice.
Wang Yongchen, founder of the Beijing-based NGO Green Earth Volunteers, said the joint issue is a big step forward.

The development and reform authorities used to put more emphasis on development, she said. But now it had started to realize the importance of environment and sustainability.

Wang said it was hoped that such a move was not only a written form, but an implemented practice.

Three Gorges firm fined for flouting environment law

(South China Morning Post, 2005-2-21)

The State Environmental Protection Administration (Sepa) has fined the China Yangtze Three Gorges Project Corporation 600,000 yuan for failing to carry out statutory environmental impact assessments before starting construction on three of its energy facilities.

A maximum 200,000 yuan penalty was slapped on the corporation's Xiluodu dam on the upper reaches of the Yangtze, known locally as the Jinsha River, the Three Gorges underground power station and the Three Gorges project power supply station, according to the Mirror newspaper, part of the Beijing Youth Daily Group.

On January 18, Sepa ordered a halt to 30 large-scale construction projects on which environmental impact assessments had not been made. The three Three Gorges projects are among the four still on hold. The fourth project is a power plant in Inner Mongolia .

The fines are the largest handed down by the environmental protection agency in a recent crackdown on illegal projects.

The report said the companies had been informed of the penalties and given a deadline to correct their mistakes.

The mainland's environmental regulations require reports on the ecological impact of all proposed projects to be lodged with the environmental agency for approval.

But the Sepa crackdown attracted a lot of attention because it was the first time the environmental watchdog forcefully challenged some of the mainland's largest corporations.

Last week the agency announced it had cleared 26 of the violating projects to resume work after they completed the required environmental impact procedures.

China underscores agriculture, ecological protection in western development

(People's Daily On line, 2005-2-5)

Premier Wen Jiabao said the issues concerning agriculture and rural areas and ecological protection should be prioritized in China's large-scale development of the western regions, designed to bridge economic and social gap with the developed eastern regions.

In his written instructions on the western development drive, issued Friday on the occasion of the fifth anniversary of the inauguration of the event, Wen called for accelerating development of agriculture and rural economy in the western regions centering around increasing farmer's income.

Of China's 30 million needy population, about two-thirds of those with an average annual income below 625 yuan (about 75.3 US dollars) live in western rural areas.

Wen said a series of measures should be taken, including exempting or reducing agricultural taxes, adjusting the product mix and promoting rural surplus laborers to work in towns, to fulfill the task.

"We should strive to guarantee that the poor population in western regions can dress warmly and eat their fill by 2007," he said.

Wen said that stepping up ecological protection and construction is crucial in the western development drive. Relevant projects, including returning the reclaimed land to forests and grassland, protecting natural forests and tackling the source of sandstorms and the spread of Gobi deserts, should be carried out concretely.

The western regions, which account for 70 percent of China's land and 30 percent of its population, plays a vital role in China's ecological protection. China's major rivers, including the Yangtze River and the Yellow River, are rising from these regions.

However, these regions are also the worst hit by soil erosion and desertification. Of the annual growth in desert area, more than 90 percent happens in the western regions.

In the instructions, Wen also called for continuing to strengthen the construction of infrastructure, actively developing unique and advantage industries, vigorously boosting the development of social undertakings and speeding up reform and opening up in the western regions.

Wen said the central authorities will never falter in carrying out the western development strategy, adding that it is a major long-term strategy that will run through the whole process of China's modernization drive.

"Speeding up the development of the western region would create new areas of growth for China's economy," acknowledged Wen. "It would help to improve the dynamics of the national economy and the staying power of its growth."

Despite rapid economic growth in recent years, the per capita GDP in the western regions accounts merely for 40 percent of that in the eastern areas.

The average per capita income of farmers in these regions is only half of their counterparts in the eastern areas.

"In building a well-off society in an all-round way, the emphasis and difficulty lies in the western regions, especially the western rural areas," said Wen. "There's no well-off society in an all-round way to speak of if the western regions are left behind. We cannot say China has accomplished modernization if the western regions are not modernized."

The Chinese government has issued a range of supportive measures to boost development of the western regions, including increasing capital input and granting preferential policies. As a result, these regions have recorded accelerated economic growth and ecological construction.

The western development strategy covers 12 localities, including Sichuan, Guizhou, Yunnan, Shaanxi, Gansu and Qinghai provinces, Chongqing Municipality, and the five autonomous regions of Tibet, Ningxia, Xinjiang, Inner Mongolia and Guangxi.

7.87 mln hectares of land rehabilitated into forests in West China

(Xinhua, 2005-2-16)

By the end of 2004, local people in China's western regions had rehabilitated and cultivated 118 million mu (7.87 million hectares) of land into forests and had planted about 170 million mu (11.3 million hectares) of trees on barren land and mountains, according to the State Council's Office of the Leading Group for Western Region Development.

The country has improved about 190 million mu (12.7 million hectares) of seriously degenerated grassland in the western region since 2003, sources from the office said.

The west of the country is home to much of China's water sources and is the largest power provider for the nation. But, it has 80 percent of the nation's desert areas, and 70 percent of thecountry's most serious water and soil loss has occurred in the region.

Despite the problems in the western region, remarkable achievements have also been made in the past five years, thanks tothe government's increasing financial assistance for ecological projects.

Major environmental projects like natural forest protection, sandstorm prevention and water pollution prevention are developingsmoothly, according to the office.

Between 2000 and 2003, the region's annual GDP growth averaged 10 percent.

The region has made substantial progress in infrastructure development in the past five years, with 60 key projects launched at a cost of 850 billion yuan (102.4 billion US dollars).

China sees fast growth of oil/gas reserves last year

(People's Daily On line, 2005-2-5)

To ease domestic oil supply-demand pressure, China's three large oil companies: PetroChina, Sinopec and CNOOC (China National Offshore Oil Corporation) increased investment for oil exploration last year, thus accelerating the growth of oil/gas reserves.

Last year, PetroChina discovered six hundred-million-ton-class oil/gas fields with newly added verified geologic oil deposits of 520 million tons, and proven gas deposits of 243.6 billion cubic meters. The oil deposits newly proven by Sinopec topped 328 million tons and proven natural gas reserve 177.9 billion cubic meters in 2004. CNOOC has discovered Huizhou 26-3 and Bozhong 34-1 oil and gas,etc.

Last year, the three oil giants also quickened the step of implementing the "going global" strategy, PetroChina obtained the right to an output of 16.03 million tons of overseas oil and 2.59 billion cubic meters of overseas gas respectively. The company also signed abroad six new projects of oil/gas exploration and exploitation; so far, Sinopec has implemented more than 20 oil/gas exploration and exploitation projects overseas. Last year, it obtained the right to the reserve of 100 million tons of oil. CNOOC, together with its cooperative partner, discovered the KE7-3 oilfield in Indonesia, the proportion of its right to Indonesian liquefied natural gas project has increased from 12.5 percent to 16.96 percent, the company also purchased part of the right to Australia's Northwest Continental Shelf project.

China's energy demands may ease in 2005

(People's Daily On line, 2005-2-4)

The growth in China's energy demand will decline in 2005, due to slower economic growth expected in 2005, said Friday's China Daily.

The growth in gross domestic product, fixed assets investment and industrial production is expected to fall in 2005 and the energy demand in the country will drop as well compared with the previous year as a result of the slowdown in economic growth, it said.

The government has said it would continue to strengthen and improve macro-controls in 2005 and will take a series of measures to prevent fixed assets investment from growing too much to ensure fast and stable economic development, noted the newspaper.

It said the electricity price will grow about 4 percent in 2005 and the adjustment in electricity prices and the implementation of the scheme to link electricity and coal prices is beneficial for the price mechanism to play its role.

But the overall electricity supply and demand situation will improve, it said.

At the same time, coal demand will grow steadily, due to the fast development of the electricity and metallurgical sectors, and booming coal demand and relatively higher prices will stimulate the increase in coal output to 120 million to 180 million tons in 2005.

The coal price is expected to grow more than 10 percent this year, the newspaper predicted.

Water shortages continue as storage rises

(China Daily, 2005-2-22)

The Miyun Reservoir, the most important source of drinking water for the nation's capital, is witnessing rising water levels for the first time in the past five years. But the increase is a mere drop in the water-guzzling ocean that the nation's capital has become.

Miyun and Guanting, two major reservoirs in Beijing, have recorded rises of 120 million and 20 million cubic metres respectively year-on-year, according to a recent document released by the Beijing Water Authority.

Children frolic around a burst water hydrant in Nanchang on December 14, 2004. [newsphoto]

And an unexpected "abundance of rain" last year went some long way to easing the problem, the authority's 2004 working report was cited as saying.

Increased reservoir levels are in part the result of the successful allocation and transfer of water from other minor reservoirs and neighbouring provinces.

A total of 130 million cubic metres (units) of water has been collected from six smaller reservoirs and transferred to Miyun, the main one.

A further 90 million units from Shanxi and Hebei provinces have also been pumped into it.

Beijing has 16 reservoirs in total, but the majority of them have dried up or been polluted over the years, leaving Miyun as the major source of drinking water supplies.

Last year, some 300,000 hectares of agricultural land requiring low water levels was cultivated in rural outskirts, and water consumption by the industrial sector achieved a "zero rise."

Precipitation, meanwhile, in 2004 was 539 millimetres, up 19 per cent on that of 2003.

"However, the rising reservoir levels are far from enough to fill the water shortage," said Yu Yaping, an official with the Beijing Water Authority.

A source close to the authority said Beijing consumed some 3.4 billion cubic metres of water last year 1.2 billion units for public and residential use, 1.2 billion for agriculture, 800 million for the industrial sector and 200 million on other uses.

"One noticeable point is that of the total 3.4 billion units consumed, 2.6 billion came from ground water," said the source.

This means surface water, which includes reservoirs and rivers, supplied no more than 800 million units.

Designed with a holding capacity of 4.3 billion units decades ago it was expected Miyun would be able to meet the drinking water demands of Beijing, Tianjin and Hebei Province.

But since 1982, "it has been dedicated to supplying Beijing alone," said Yu.

Liu Peng, an engineer with the authority's water conservancy office, told China Daily that a new round of water economy measures are to be taken this year.

To that end, the authority drafted a new conservancy guideline, which was turned into a municipal legislature after it won approval from the municipal People's Congress in January.

"It's expected to take effect during the first half of this year," said Liu.

At the same time, some newly-built public buildings and residential communities are required to have water recycling facilities.

The city consumed 140 million cubic metres of recycled water last year, representing a utilization rate of 28 per cent.

This year, the percentage of recycled water forming the city's total consumption is set at 30 per cent.

"It is set to achieve 50 per cent by 2008," said Liu.

Mayor Wang Qishan, announced in his working report submitted to the Third Session of the 12th Beijing Municipal People's Congress, the government is to lay 70 kilometres more of pipeline for recycled water this year.

Water prices are also set to rise by about 1 yuan (12 US cents) per cubic metre, said Liu.

Protecting water sources

The Beijing Municipal Committee of the China Democratic National Construction Association has also appealed to the municipal government urging more efforts to protect water sources, mainly located in the city's northern suburbs, especially in Huairou and Miyun districts.

The committee submitted a nine-page proposal to the Third Session of the 10th Beijing Municipal Committee of the Chinese People's Political Consultative Conference, suggesting that district governments with water sources be required to protect supplies and cut pollution, as opposed to focusing on economic growth.

"When evaluating the achievements of local officials in the districts, we should see whether they've done a good job in ensuring quality water to Beijing residents, rather than merely statistical growth in GDP," said the proposal.

Goliaths compete for nuclear plant pact

(China Daily, 2005-2-23)

Three global nuclear power heavyweights now competing for designing and building four nuclear units in China will submit their proposals next Monday, a national nuclear technology company said yesterday.

The photo shows the nearly-finished Tianwan nuclear power plant, co-constructed by China and Russia, in Lianyungang, east Jiangsu Province on December 16, 2004. [newsphoto]

US-based Westinghouse, France's Areva and Russia's AtomStroyExport (ASE) are busy with finishing touches on their plans for four nuclear reactors in Zhejiang and Guangdong provinces.

The Preparatory Office of the State Nuclear Power Technology Corporation told China Daily that a ceremony will be organized on Monday to accept finished bids from the three competitors.

"We will soon organize assessments," the preparatory office official said.

He did not reveal when an announcement would come on a winner of the contract for the four 1,000-megawatt, pressurized-water nuclear power facilities. Two of the four units will be located in Sanmen, East China's Zhejiang Province, and the other two in Yangjiang, South China's Guangdong Province.

The preparatory office, which started work last September under the direct authority of the State Nuclear Power Self-reliance Leading Committee, is to set up the nuclear power corporation, organize tenders, carry out technology transfers and negotiate contracts for nuclear power projects.

Having been buried in aggressive competition, the three companies all boasted firm support from their own governments and are confident their companies will stand out.

The US-based Westinghouse, which has won no power plant contracts during its two-decade presence in China, stepped forward at the weekend with news that a combination of loans of up to almost US$5 billion have been approved by the US Export-Import Bank to help construct the four nuclear power reactors.

Liu Xingang, chief representative of Westinghouse China, said the promised loan will help meet the financial requirements required by the Chinese side, which has asked competitors to earmark capital for their proposals.

Liu said his confidence resulted from cutting-edge technology of the equipment and the government's deregulation of technology exports.

"The US Government has done a lot since last year to approve exports of the AP-1000 reactor to China," he said.

Arnaud de Bourayne, president AREVA China, said preparatory work on bidding started five months ago, with great enthusiasm, to meet the exact bid objectives.

"We are ready to deliver our scheme," said the president. But he did not disclose information on financing efforts.

Russia's ASE did not respond but an earlier report cited company confidence based on the close relationship between Russia and China. It has already been involved in the construction of two nuclear power units in China, which are expected to start operating this year.

China has drafted ambitious plans to construct nuclear power plants by 2020 in an effort to meet the increased demand for power.

Shandong, Jilin opting for nuclear power plants

(China Daily, 2005-2-24)

East China's Shandong Province is moving ahead with three nuclear power projects, which are expected to produce electricity by 2010.

The three projects are the Haiyang Nuclear Power Station in Yantai, Rushan Nuclear Power Station and Rongcheng Power Station in Weihai, sources with the Shandong Provincial Development and Reform Commission said yesterday.

Statistics show that Shandong has a total generating capacity of 30 million kilowatts a year. The province can currently provide only half of the 70 million tons of coal burnt to produce this electricity, with the rest being brought in from other provinces.

It is estimated that the province's annual need for electricity-generation capacity will reach 50 million kilowatts in 2010. Hence, the province urgently needs to increase the proportion of nuclear power it produces.

The layouts for the three plants are quite similar, with an annual capacity of 4 to 6 million kilowatts. An investment of 40 billion yuan (US$4.8 billion) to 80 billion yuan (US$9.6 billion) will be needed for each of the three plants.

To date, the National Development and Reform Commission and the Ministry of Science and Technology have approved the preliminary feasibility reports for the Haiyang and Rushan plants. But all three projects are still waiting for the final approval from the central government.

Jilin project

In another development, Northeast China's Jilin Province is also considering building the province's first-ever nuclear power plant, according to local media reports.

China Electric Power Investment Corporation said it plans to invest 40 billion yuan (US$4.8 billion) to build a nuclear power station with a capacity of 4 million kilowatts, local media reported.

"Up to now, the company has already invested over 10 million yuan (US$1.2 million) on preliminary construction," a senior official from the Baishan Development and Reform Commission was quoted as saying by the Shenyang-based East Asia Economy and Trade News.

Jingyu, a county in Northeast China's Jilin Province, has been selected as the site for the plant because of its geological features and rich water resources after research done by the company and a local institution.

This project will be the largest in the history of Jilin Province, said the newspaper.

However, the construction work schedule has not yet been revealed.

Jilin Province needs a generating capacity of 12 million kilowatts at present. However, production has so far lagged behind demand.

The construction of the nuclear power station would help solve this shortfall.

China to beef up surveying of mineral resources home and abroad

(People's Daily On line, 2005-2-1)

Mineral resources which have been discovered so far in China account for 12 percent of the world's total, following US and Russia. However, the resources per capita is merely 58 percent of the world's average, ranking the 53rd in the world. Generally, China is a populous country with insufficient resources.

This map of China's mineral resources endowment was depicted by Meng Xianlai, Director of Bureau of Geological Investigation recently.

He thought that the country would have to consume more mineral resources than ever to fuel its modernization. He has noticed that the country's fast growing national economy has been whetting its appetite for important minerals like oil, iron, copper and aluminum. As a result, consumption of mineral resources is rising faster than the storage.

Imports of ores have been inflating in recent years to deal with the domestic supply shortfall, which in turn has led to swelling trade deficit.

Meng is concerned about the possible adverse influence on the national economic security and sustainable development due to the overdependence on foreign supply. He recognized that the shortage of important mineral resources has constituted a bottleneck to the sustainable development of the economy and society.

Meng believes that exploiting both the domestic and overseas resources is the right solution to the problem. "Mineral resources are global. It is impossible for any country to rely on its own resources to fuel its development," said Meng.

He suggested further international cooperation and exchanges on geology, as well as efficient use of overseas resources, so as to strengthen the participation into and diversify the use of foreign resources. WTO makes it possible, he said.

In the mean time, he stressed, more efforts should be focused on discovery of more resources and promotion of commercial geological missions.

He disclosed that China west had great potential for mining. And rich resources are expected under the earth below 500 meters in the east.

Meng also made suggestions on more efficient use of the country mineral resources. In his opinion, basic geological assessments should give the whole community an access to the information which reduces risks of commercial exploitation. This will give a spur to the development of resources.

He urged to place priority on the surveying of strategic resources, especially oil and gas. Researches and assessments should be mainly focused on new land areas and major offshore basins where oil and gas resources are rich. Studies should also be conducted on unconventional energy such as gas hydrate and oil shale.

He also pins his hope for more mineral resources on the geological prospecting in the east and west part of the country.

Nation seeks energy efficient buildings

(China Daily, 2005-2-24)

China will launch a massive campaign soon to implement energy savings and promote environment friendly buildings nationwide, Vice-Minister of Construction Qiu Baoxing said yesterday.

Qiu said the campaign is crucial since the country is facing growing shortages and continuing waste of resources.

"If we do not take measures, the situation will continue to worsen," Qiu told a press conference in Beijing.

Qiu also said the so-called "green" building campaign hopes to curb flawed trends in China's process of urbanization. The trends are listed as blindly pursuing "new, unusual, and different" design schemes and always wanting to become "No 1" in the world.

Statistics indicate that making of solid clay bricks damages 8,000 hectares of arable land annually in China. Compared with the building industry in the developed countries, China's steel consumption is 10-25 per cent higher, 80 kilograms of extra water is needed for mixing 1 cubic metre of concrete and 30 per cent more water is needed to flush a toilet.

To make the buildings more energy efficient, environmental impact evaluations will be implemented during the process of construction and when choosing building and decoration materials, electric and machinery equipment, low-voltage electric equipment, landscape equipment, stadium seating, air-conditioning equipment and electronic recording equipment.

The ministry's efforts also include control over construction scale and maximizing conservation of resources to ensure resource conservation and harmony between humans and the environment.

"Those are basic principles of architecture which include function, economy and beauty," said Qiu.

Qiu even suggested ideas such as using solar cookers in kitchens, setting up smart wind power generators at the top of buildings and letting intelligent systems control heating or cooling.

"Ideas are many to make the buildings in the most populous country greener, environmentally friendly and healthy," said Qiu.

With the UN's Kyoto Protocol coming into force several days ago, Qiu said some of his ideas can be included in international cleaner development mechanism (CDM) projects. The CDM is crucial part of the protocol.

Under CDM, developed countries can carry out emission-reduction projects in developing countries through financial and technical co-operation. This counts towards their emission targets.

Qiu said his ministry will consider CDM projects soon.

James Jao, chief executive officer of the US-based J.A.O. Design International applauded the government's commitment in saving energy in the building industry.

"But the most important work is to improve the awareness of the public and strengthen enforcement of the energy-saving codes and regulations," said Jao.

He said many people in China still misunderstand the concept of the terminology of green building.

"Green building" does not mean building with a lot of green plants, trees or flowers. The term has a very clear parameter about it. Using recycled materials, recycled water and re-useable energy are essential features of green buildings.

China continues to face electricity shortage in 2005

(People's Daily On line, 2005-2-27)

An industry group has predicted China will continue to face electricity shortage in 2005, estimated at 20 million to 25 million kwh, despite rapid growth of electricity generating capacity.

"The tension will be eased a lot compared with the situation in 2004," said Wang Yonggan, secretary-general of the China Electricity Council (CEC), an association of Chinese electricity businesses.

According to Wang, the installed electricity generating capacity is supposed to rise 70 million kw, or 15.88 percent, to 510.7 million kw in 2005. On the other hand, the demand is expected to rise 13 percent.

Wang said not all the installed generating units would operate at full capacity due to tight supply of coal, oil, water and the influence of bad weather and natural calamities.

An analysis report of the CEC indicates the electricity shortage will be most severely felt in the economically developed east China this year, with the gap estimated at around 11 million kwh. The extent will be much lesser in north China, central China,south China, northeast China and northwest China.

CEC statistics show China's electricity consumption reached 2.17 trillion kwh in 2004, up 14.9 percent over the previous year.

Chongqing achieves remarkable progress in environment

(People's Daily On line, 2005-2-26)

Southwest China's Chongqing municipality reported great progress in ecological and environmental protection with a total government investment of 20 billion yuan (about 2.4 billion US dollars) in the past 8 years, said Chongqing Mayor Wang Hongju Thursday.

Wang said Chongqing has invested 20 billion yuan to improve the environment of small river valleys, curb land erosion and implement projects to decrease air, water and land pollution sinceit became a municipality in 1997.

The city has built 17 sewage treatment and garbage disposal plants, most of which are in operation. Therefore, 72 percent of the sewage in the city is processed before running into rivers.

Wang also noted that the water in the Three Gorges Reservoir area has kept high quality.

Chongqing has also made some progress in geological disaster prevention, natural forest protection and returning farmland to forest or grassland.

The municipality has replanted 800,000 hectares of trees and grass, increasing forest coverage by ten percent to 27 percent and reducing 11 million tons of silt which used to run into the Yangtze River each year.

To improve environment, the city also relocated 11 companies with serious pollution problems last year and encouraged residents and companies to use clean energy such as natural gas rather than coal.

Japan to talk about end of China loans - media

(China Daily, 2005-02-05)

Japanese Foreign Minister Nobutaka Machimura said on Thursday Japan would end development loans to China but would hold talks with Beijing to ensure the cessation of the aid was not disruptive, Kyodo news agency said.

Japan has already reduced low interest loans to booming China for three straight years, adding tension to a relationship long soured by Japan's brutal occupation of parts of China from 1931 to 1945.

"We will hold talks with the Chinese side toward a soft landing for an end to yen loans while considering it in the overall policy toward China," Kyodo news agency quoted Machimura as saying.

Machimura did not give a date for the end of loans to China.

He was speaking during a meeting on overseas aid attended by various cabinet ministers, Kyodo said. He said in December Japan may review its plans for economic aid to China this year.

The issue is highly sensitive as some analysts say China sees Japan's development aid as a form of war reparations even though Japan says all wartime compensation issues concerning China were settled by a 1972 joint statement that established ties. The Nihon Keizai Shimbun business daily said last week Japan may stop fresh development loans to China by 2008 when Beijing hosts the Olympics. Government officials later said no decision had been made to stop fresh yen loans.

Some Japanese politicians argue that China's rapid economic and military expansion disqualify it from receiving aid from Japan, which is struggling with huge budget deficits.

Japan scaled back loans to China by 20 percent in 2003/04 to about $940 million, leaving India as the top recipient of Japanese foreign aid loans.

Despite a flourishing economic relationship, ties between Tokyo and Beijing have been chilled by a range of disputes, including Prime Minister Junichiro Koizumi's annual trips to Yasukuni shrine, which honours Japan's war dead.

Chinese wind farm project set to request CDM registration

2005-1-13

The Huitengxile Windfarm Project could become the first project in China requesting registration as a CDM project after it was approved by the Chinese designated national authority (DNA) in late December.

Within 20 days from the DNA meeting, held 30 December, a formal Letter of Approval (LoA) for the project will be issued according to the Interim Measures for Operation and Management of Clean Development Mechanism Projects in China.

Huitengxile Windfarm Project is one of the projects participating in the CERUPT2001, and was awarded a carbon contract by the Dutch Government in March 2003, the first carbon funding secured in China.

However, many elements of the project, such as the total capacity, the project components, and the name of the Project Entity have been changed since the start of the CDM preparation in November 2001.

According to the latest PDD the wind energy project, located in the Inner Mongolia Autonomous Region, has a capacity of 25.8MW, being estimated to result in total emission reductions of 514,296 tCO2e over a crediting period of 10 years.

The validation for the Project has been undertaken by TUV SUD since spring 2004. The validation will not be finalized until the new LoA is formally issued, by then the project is ready for the request of CDM Registration, which is most likely to be occurred in the second part of January.

It will significantly encourage various stakeholders of CDM development in China if it is successfully registered with the EB.

Health

Official: No need to feel panic about meningitis

(China Daily 2005-2-6)

The present meningitis cases in China are just "normal and sporadic" and people need not feel panic, the Executive Vice-Minister of Health Gao Qiang said Saturday.

Of the total 258 cases in 28 provinces, autonomous regions and municipalities of China in January, 49 were found in 21 counties and districts of east China's Anhui Province, 30 cases in 23 counties and districts of central China's Henan Province, 19 cases in 17 counties and districts of north China's Hebei Province, 16 cases respectively in Jiangsu and Sichuan provinces.

Eight-year-old Xu Zhihong has vaccination for meningitis at the Beijing Centre for Disease Prevention and Control on February 2, 2005. [newsphoto]

The rest 128 were scattered in 23 provinces, autonomous regions and municipalities, with each reporting less than 10 cases, statistics released by the Health Ministry show.

Gao said the disease will not affect the ordinary activities of people during the Lunar New Year. "It's sporadic and no severer than previous years for the time being," he said.

Official figures reveal that 2,250 meningitis cases were reported in 2001, 2,551 in 2002, 2,535 in 2003, and 2,698 in 2004.

"Although the total number of cases reported in January this year was higher than that of the same period in 2004, it was lower compared with the corresponding period of 2003 and 2002," Gao said.

He also noted that China in recent years has maintained an annual infection rate of about 2 among 1 million people on average, which is lower than that of the United States and some European countries across the world.

Yunnan offers free treatment to HIV carriers

(Xinhua 2005-2-11)

A thousand AIDS and HIV patients in southwest China's Yunnan Province will receive free traditional Chinese medicine this year, provincial AIDS control officials said Sunday.

This is part of the province's pilot project using traditional Chinese medicine therapy in AIDS control.

A neighbor of the Golden Triangle, one of the main drug source areas in the world, Yunnan has reported more than 10,000 HIV carriers and AIDS suffers, second in the country to Henan Province.

The Chinese government estimates that China has about 840,000 HIV carriers.

Many believe traditional Chinese medicine, which is cheap and without major side effects, helps improve HIV carriers' immune systems.

Harbor for HIV/AIDS carriers built in Shanxi

(People's Daily on line 2005-2-16)

A hospital in North China's Shanxi Province had set up a spa for HIV/AIDS sufferers where they could receive treatment and make a living, Xinhua News Agency reported Tuesday.

Some 20 patients had been treated at the 90-mu (6-hectare) compound of hospital wards, entertainment venues and farmland since it opened on July 24 last year.

The Linfen City Infectious Disease Hospital last year rented the land from Licun Village, some 10 kilometers from the hospital, with 1.5 million yuan (US$182,926). Hospital staff called it "Green Harbor," in the hope that it could offer not only physical treatment but also psychological comfort for HIV/AIDS sufferers and their families.

The area is divided into three zones: treatment zone, logistics zone and work zone.

Patients and their families can grow grain, vegetables and flowers in the 70-mu work zone, and then sell the farm produce to make some money.

The area also has an entertainment venue, a library and a gym.

There are 840,000 HIV/AIDS sufferers in China. While the Chinese people's knowledge of HIV/AIDS was improving greatly, there was still wide-spread fear and bias toward the disease.

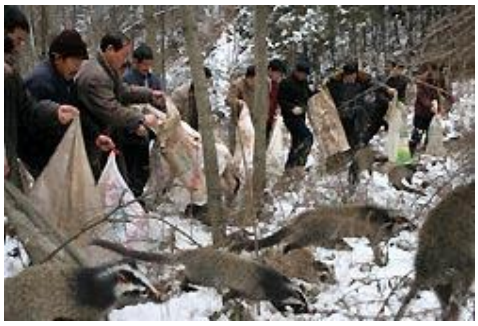
As a result, many HIV/AIDS suffers can't work like normal people although their symptoms had not fully developed.

Does SARS virus still exist in the wild?

(China Daily, 2005-2-23)

Does the SARS (severe acute respiratory syndrome) virus still exist in the wild? Where will it come from if an epidemic breaks out again?

Experts are still arguing these questions.



Farmers in Henan Province free the raised palm civets on December 28, 2004. [newsphoto]

An American scientist was quoted as saying the killer virus has been contained so effectively that it can be considered eradicated.

However, experts from China, where the epidemic first broke out, say it is too optimistic to say that now, since scientists still do not really know the real source of the virus.

Scientists are confident that SARS no longer exists in the wild and has essentially disappeared as a threat, said Kathryn Holmes, a professor of Microbiology at the University of Colorado.

The epidemic strain has not been seen in nature since June 2003, she said at the American Association for the Advancement of Science conference early this week, The Times reported.

She also said that China's Himalayan palm civets, thought to be the most likely source of the SARS virus, have been wrongly blamed, and do not harbour the epidemic strain.

For SARS to return as a threat, it would have to evolve again from scratch or be released in a laboratory accident or bio-terror attack, she said.

"It is too early to say that the corona virus, which caused the SARS epidemic, does not exist in the wild any longer because up to now experts still failed to find the origin of the virus at all," said Liu Qiyong.

Liu, a leading expert from Chinese Centre for Disease Control and Prevention, has continued doing research on the SARS source around China since the outbreak of the epidemic in 2003.

He said that people cannot say the virus has been eradicated only because "we have not found it."

Liu added that he and his group have found the same SARS virus in Himalayan palm civets and many other wild animals since early 2004.

However, Liu admitted that he has failed to find the virus in any wild animals since June 2004.

No evidence can fully prove that the palm civet is the source of the virus, and it only played a role of an "amplifier," which is susceptive for the SARS virus and made it spread wider, Liu said.

SARS still exists "out there" - probably still in a species of wild animals (not just the civet) - and could therefore "resurface" at any time, said Roy Wadia, World Health Organization spokesman in Beijing.

He recalled the Ebola virus, which emerged out of "nowhere" in central Africa, and claimed many lives, only to "vanish" again for several years before re-emerging later.

Although arguments continue, experts all agree that, if SARS were to re-occur, it could be contained quickly because several vaccines against it have been developed, along with better treatment methods and prevention experiences.

Biosafety standards at laboratories that carry out work on the SARS corona virus need to be strengthened not only in China but around the world, said Wadia.

"We still do not have a SARS vaccine for the general population, although trials are going on in China and the United States," said Wadia.

"SARS can still pose a threat, and should be taken very seriously," he noted.

Chinese lawmakers call on sever punishment on revealing sex of fetus

(People's Daily, 2005-2-28)

Chinese doctors would now face criminal prosecution if they reveal the sex of a fetus expectant parents for non-medical reasons, according to suggestions proposed by Chinese lawmakers.

On the 14th meeting of the Standing Committee of the National People's Congress (NPC), the Chinese top legislature, members proposed the revision of the Criminal Law.

Many lawmakers said they were concerned about the abnormal ratio of male to female babies born in China, which is 119/100 and even 130/100 in some regions.

Chinese people, especially those in rural areas, have a long tradition of preferring boys over girls, because sons Historically supported their parents in old age.

Since China launched the family planning policy in late 1970s, this preference resulted in many parents choosing to abort the pregnancy if the doctor told the couple they would have a daughter.

Chinese Health Ministry issued a regulation to prohibit doctors from revealing the sex of a fetus for any non-medical reason.

But there remains many medical workers who disobey the order and face administrative penalties and not criminal charges.

China's current Criminal Law does not include clauses on the crime of illegally revealing fetus sex information or abandoning female fetuses.

"The chaos in fetus sex detection has caused a serious imbalance in the sex ratio, which has resulted in serious social problems. We must prevent this terrible scenario by adding related clauses into the Criminal Law," Xu Zhihong, member of the NPC Standing Committee and also the president of the prestigious Beijing University, said.

NPC deputy Wei Lihui, a famous doctor, also showed her support of the revision. She said criminal sanctions are necessary to deter the doctors who defy the ban.

Chinese central government has taken various measures to correct the sex ratio imbalance such as rewarding farmers who followed the family planning policy.

Chinese lawmakers are considering whether to upgrade the punishment - now just fines and some administrative measures - into criminal law sanctions. There is only a charge on people who have no medical certificate but conduct abortions.

Some 10-plus NPC Standing Committee members are proposing to add a criminal article targeting on licensed doctors who reveal the sex of fetuses or conduct abortions for non-medical purposes.

But some are adding a note of caution. "Revealing the sex of a fetus is against professional ethics but it alone is not up to the level of criminal offence," said Qiu Xinglong, a law professor of the Xiangtan University based in the central province of Hunan.

He said the identification is punishable only when it leads to selective abortion. "Having a rule to deter abortion is no problem, but where to draw the lines is an issue lawmakers need to tread upon carefully."

China draws up crisis countermeasures

(People's Daily, 2005-2-27)

The State Council has put together an emergency contingency package in answer to the frequent disasters and accidents in China that have killed more than 200,000 each year over the past decade.

The 106-item package means the country's first nationwide contingency framework has taken shape, said a State Council report delivered to the Standing Committee of the National People's Congress (NPC) on Friday.

State Councillor Hua Jianmin read the report to senior legislators on behalf of the central government.

The package will lead to the establishment of an early warning system and improve the administration's ability to cope with emergencies, according to the report.

Natural disasters, accidents, public health and public security incidents combined to kill about 200,000 people in China last year, incurring more than 455 billion yuan (US$55 billion) of direct financial losses.

State leaders called for a counter-emergency mechanism in 2003 after the country suffered an outbreak of SARS (serious acute respiratory syndrome).

About 500 deputies moved for drawing up legislation on emergencies and strengthening emergency countermeasures at last year's NPC full session.

But coming up with countermeasures is not only about overcoming disasters, according to Mo Yuchuan, a professor of law at the Renmin University of China.

"Usually, government departments are granted great power and many mandatory measures during emergencies in order to overcome crises," said Mo. "But it does not mean they can do whatever they want or even abuse their mandate."

The counterplans should not only guide the handling of an emergency, but in a sense regulate and restrain the government by making clear the scope of its role," he said, adding that the emergency plans tally with the spirit of the rule of law.

The government report said many deaths could have been avoided had effective emergency countermeasures been in place, the stampede in Beijing's Miyun County in early 2004 which killed 37 being an example of this.

The State Council's new package will offer early warnings according to professional prediction and analysis. Four colours will be used to judge the severity of an emergency red, orange, yellow and blue.

Also required will be a genuine report to the State Council within four hours from a county government as well as the provincial government when a severe public emergency occurs within their jurisdictions.

Some local governments have already taken it upon themselves to establish such countermeasures. In Shanghai, the city's 17 government departments, including the public security department, water resources department, electricity supply department and the natural gas supply department, have jointly drawn up contingency plans.

Once a citizen dials "110," any one of the 17 departments will be on the scene within a short space of time.

The coastal province of Zhejiang has put together a comprehensive typhoon early warning system and emergency countermeasures.

In 2004, the local government evacuated local citizens in time after receiving an early typhoon warning, minimizing casualties and economic loss.

Formalizing a statute on emergencies is high on the NPC Standing Committee's 2005 legislative agenda.

Watchdogs go after malignant red dye

(China Daily, 2005-2-24)

Sudan I, a potentially cancer-causing colorant, is the latest target for China's product quality watchdogs after the disclosure that the red dye has tainted hundreds of food items in Britain.

The State Administration for Quality Supervision and Inspection and Quarantine yesterday slapped a ban on imports of any foods containing the carcinogenic substance, and began screening foods from the European Union.

The British Food Standards Agency last Friday advised people not to eat foods that have been contaminated with Sudan I, an illegal dye which was banned for use in the United Kingdom and across the European Union.

Sudan I can contribute to an increased risk of cancer, but there is no risk of immediate illness and the health risk generally is likely to be very small, Food Standards Agency Chief Executive Dr Jon Bell said in a statement posted at www.food.gov.uk the agency's website.

"But if you have any of these products at home, it's sensible not to ingest them," he was quoted as saying.

By Tuesday, the watchdog had released an updated list of 428 affected food products, ranging from BBQ sauce to pies, including those made by Heinz and Unilever.

China's quality supervision agency put a Chinese version of the known affected list, plus an urgent notice, in the public domain (www.aqsiq.gov.cn) yesterday.

The agency also asked local inspectors to check domestic food makers to ensure their products or raw materials are free of the dye.

Food that contains the substance is not allowed to be sold or exported, a statement from the Chinese agency said. China has already forbidden the use of Sudan I in foods, according to agency sources.

Unilever Co Ltd, which had nine of its products produced in Britain included in the affected list, yesterday said those food products are not made or sold in China.

"Unilever China has also checked all its Chinese suppliers and found their products contain no Sudan I," Wang Hui, a staffer with the Unilever Co Ltd in Shanghai, said yesterday.

Heinz, another leading food maker, yesterday said none of its five products being recalled in Britain were sold in China, including the Hong Kong region and Taiwan Province.
All Heinz companies in China follow Chinese and international quality standards, and comply with the Hazard Analysis and Critical Control Points requirements, said Wang Lizhi, external affairs manager for Heinz (China) Investment Co Ltd.

New Bird Flu Vaccine Developed

(*China Daily* February 7, 2005)

Chinese scientists claim to have developed a vaccine to prevent the spread of the killer bird flu.

The Ministry of Agriculture says its new vaccine can effectively "cut a key link in the transmission chain of the highly pathogenic avian influenza among water fowl."

Using a technique called reverse genetics, scientists at the Key Laboratory of Animal Influenza, affiliated to Harbin Veterinary Research Institute, altered the genome sequence of the virus to construct a vaccine that is believed to be safe to both poultry and mammals.

The vaccine will be administered to fowls in the country's key water areas, including rivers and lakes, a ministry statement released yesterday.

Laboratory tests show the vaccine enables ducks and geese to fight H5N1, the highly lethal strain of bird flu, three weeks after the flocks were vaccinated, the statement claimed.

The new vaccine also provides at least 10 months of protection for chickens four months longer than the existing bird flu preventive drugs.

"China has developed and mass-produced shots targeting H9 and H5N2, the less dangerous subtypes of avian influenza," Xu Shixin, a division director of the Veterinary Bureau of the Ministry of Agriculture, said yesterday.

The bureau has released a certificate for the new vaccine as a registered veterinary drug.

Ministry sources said the new vaccine had overcome the bottleneck in the technology of developing a remedy for preventing "highly pathogenic bird flu."

Apart from the encouraging laboratory test results, field tests also indicate that upon receiving two shots of the vaccine, ducks and geese can each produce antibodies effective for 10 months and three months, respectively.

The birds could then fight the H5N1 strain of virus.

"The vaccination thus makes it impossible for ducks and geese to become the load of H5 subgroup bird flu virus. Therefore, it can cut a key link for the highly pathogenic avian influenza to spread," said the ministry statement.

China developed advanced bird flu virus test technology (RT-PCR reagent kit) last April. This can detect H5, H7 and H9 subgroups of the bird flu simultaneously in several hours.

Vaccination is a must for water fowls and poultry farms in Chinese regions at high risk, according to a national teleconference in bird flu prevention on January 28 in Beijing.

Elsewhere in Asia, the Cambodian Ministry of Health and the World Health Organization (WHO) confirmed on Saturday a 25-year-old woman from Kampot Province, who died of respiratory illness in Viet Nam on January 30, was infected with avian influenza.

This is the first human case of avian influenza in Cambodia, according media reports.

Hundreds of wild birds have died of avian influenza in central Thailand in the past two weeks.

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Appendix: background

This newsletter is motivated by the growing cooperation between Switzerland and China in the areas of Environment, Science and Technology, and Health.

At the end of 2003, both countries have signed a Memorandum of Understanding to strengthen scientific and technological cooperation in varied areas including medicine, biotechnology, nanomaterial, fuel cell, microsystems, environment protection, communication and information technologies, fine machinery. Implementation of this MOU requires increased contacts between Swiss and Chinese research teams, and ultimately joint research activites.

At the beginning of 2004, Switzerland has become a full participant in the European Union's FP6 large-scale research platform. On the other hand, China has an agreement with FP6 allowing its researchers to take part and contribute to research programmes. In practice, this also facilitates joint research between Swiss and Chinese researchers.

In the area of environment protection and sustainable development, Switzerland and China are actively cooperating with generous support of the Swiss government. In June, Switzerland has granted China a new mixed credit line allowing import of Swiss technology with a positive impact on the environment with a grant of the Swiss government.