



**The China Sustainable Energy Program**  
**中国可持续能源项目**

**C H I N A C L I P P I N G S**

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Topping this issue, the US government's export credit agencies have financed \$23 billion of overseas fossil fuel projects, which contradicts US foreign policy goals to reduce greenhouse gas emissions by developing countries under the Kyoto Treaty.

Last year, China invested more of its national budget in environmental protection than any other developing country. The Chinese government plans to develop environmental technology industries by encouraging overseas investment, and has received over US\$3.3 billion dollars in foreign funds to date, and Qu Geping, Chairman of the Environmental Protection and Resources Conservation Committee of the National People's Congress won a global prize for his contribution to environmental protection in China. An article by Wen Bo discusses the rise of environmental activism in China.

The World Bank approved a US\$100 million loan, and the Global Environment Facility approved a US\$35 million grant for renewable energy projects in China. Meanwhile, China stepped up the closure of small, inefficient power plants in order to reduce pollution and electricity prices.

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大卫与露茜·派克德 联盟  
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*The David and Lucile Packard Foundation in partnership with The Energy Foundation*

## US Funds Fossil Fuel Project Overseas

By Danielle Knight

*[Inter Press Service: 4/29/99]*

WASHINGTON—The US government's export credit agencies have financed overseas fossil fuel projects to the tune of 23 billion dollars - ignoring the fact they release the heat-trapping "greenhouse gas" blamed for global warming, says a new report.

The report, by the Institute for Policy Studies and Friends of the Earth, says this funding for coal-fired power plants and oil and gas extraction projects in developing countries contradicts US foreign policy objectives to reduce the reliance of developing countries on fossil fuels in order to avert the impact of climate change.

According to the report, titled "Business as Usual," between 1992 and 1996, the US Export-Import Bank (Ex-Im) and the Overseas Private Investment Corporation (OPIC) underwrote 23.2 billion dollars in financing for oil, gas, and coal projects worldwide.

During the life of these projects, some 25.5 billion tons of carbon dioxide, an amount equivalent to total global greenhouse gas emissions for 1996, will be released into the atmosphere, the report alleges.

The US rate of financing far outpaced that of the European Bank for Reconstruction and Development which provided 1.2 billion dollars in loans for fossil fuels projects between 1992 and 1997, the report says.

The World Bank, in comparison, underwrote 13.6 billion dollars in financing for such projects between 1992 and 1998.

"OPIC and Ex-Im are guaranteeing climate change for all of us," says Daphne Wysham, energy policy analyst with the Institute for Policy Studies, a Washington-based progressive think-tank.

"Money talks and our billions of dollars in support for fossil fuels are out-talking and totally contradicting our stated foreign policy goals of 'meaningful participation' by the developing countries under the Kyoto Protocol."

This international treaty, drawn up two years ago in the Japanese city of Kyoto, binds the United States and 37 other industrialised countries to reduce their emissions of greenhouse gases by an average of at least five percent below their 1990 levels by the year 2012.

Most scientists believe that these gases - produced through burning oil, petrol, coal and other mostly carbon-based chemicals - have been gradually warming Earth's atmosphere and altering its climate.

If current record-breaking warming trends continue, average global temperatures could rise between one and 3.5 degrees centigrade by the year 2050, according to expert studies.

The US Senate has effectively blocked any action by Washington under the Protocol until key developing countries also agree to limit their greenhouse gas emissions.

"Even if we could eventually halt all emissions from the industrial nations required to limit emissions under the Kyoto Protocol, emissions from the 134 developing nations would continue to grow and atmospheric concentrations of greenhouse gases continue to increase," Sen. Frank Murkowski, the Republican chairman of the Senate Energy Committee, said this week.

"It is hypocritical for the US government to ask for meaningful participation of developing countries while simultaneously funneling billions of taxpayer dollars towards the opposite goal," says Jon Sohn, a policy analyst at Washington-based Friends of the Earth.

The money went in the form of loans, investment guarantees and insurance designed to help US companies compete for business abroad.

Larry Spinelli, a spokesman for OPIC, told IPS, that the agency will be studying the report but, at first glance, "the numbers seem inflated and misleading."

"I question the way they have utilized these numbers and calculated out the total emissions," he says.

Spinelli says OPIC calculates its contribution to global emissions to be only 1/300th of the total. "About 60 percent of the projects funded by OPIC in 1998 were natural gas—which produces less carbon emissions," he adds.

Officials at the Import-Export Bank were unavailable for comment.

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*(US Funds Fossil Fuel continued)*

'Business as Usual' says that OPIC and Ex-Im, however, are investing in coal-fired power projects in countries where less carbon-intensive energy options, from natural gas to solar, are abundantly available.

In Indonesia, for example, the two agencies committed a combined 1.47 billion dollars in support of the 4,920 megawatt Paiton coal-fired power complex, despite Indonesia's massive proven natural gas reserves, according to the report.

"OPIC later matched its record-breaking assistance package for this Indonesia burner in support of a coal-fired power plant in Morocco, the biggest private power project in Africa," it said. This project was near a 50 megawatt wind farm project.

Ex-Im has been similarly devoted to fossil fuels in China, committing a combined 1.66 billion dollars toward the development of seven power plants in the country over six years. Six of these were coal-fired while only one was fueled by gas.

"If we really want China and India to stop burning coal shouldn't we be providing development assistance and export support to US industries that make solar or wind power cheaper and more attractive for developing countries to consider than yet another coal burner?," asks the report.

Staff at both OPIC and Ex-Im is not encouraged to invest time in labor intensive smaller scale wind and solar projects that have less pay-offs for the institutions than an offshore oil drilling project, the report says.

"This sort of internal change in staffing and incentive structures - from chasing after the 'big deal' to cultivating the small players - must be encouraged."

The report also urges Ex-Im to build on its existing "Environment Exports Programme," which is designed to increase the agency's support for environmentally beneficial goods and services. To date, this programme has been used mainly to encourage the enhanced efficiency for fossil fuel power plants, not renewables.

OPIC and Ex-Im should no longer fund coal-fired plants in developing countries, because of their adverse health and environmental impacts, says the report.

"There is no disputing the fact that large coal fired power plants play a large role in affecting the earth's climate," it says.

"Further support of these plants sends the wrong signal to policy makers in developing countries."

## Country to Speed Up Energy Development

*[China Daily: 6/3/99]*

To meet the country's expected energy demands, China is accelerating the development of its energy resources, expanding existing production and extending into other renewable energy sources.

Analysts predict the total consumption of China's nonrenewable energy resources will equal 1.38 billion tons of standard coal per year.

A state planning official said China will base its energy development on coal production, while paying close attention to the advancement of geothermal, wind, solar and tidal energy. The country is expected to develop the Shenfu and Dongsheng coalfields and link China's major power grids. And the oil industry will make exploration in western China and in offshore areas a priority.

## China Plans to Use More Overseas Capital for Environmental Industries

[Xinhua: 6/6/99]

BEIJING—The Chinese Government plans to use overseas investment to speed up the development of its environmental protection industries, the Business Weekly reported today.

A senior official with the State Environmental Protection Administration (SEPA) told the English newspaper that introducing more foreign capital and advanced technologies would be an effective way for the country to accelerate the development of the industry.

The report said that the environmental sector has so far absorbed more than 3.3 billion U.S. dollars in foreign funds. Foreign capital has mainly come from the World Bank, the Asian Development Bank, United Nations Development Program, bilateral government organizations and multi-lateral international organizations.

"Cooperation with foreign counterparts will be one of the major ways to lure more foreign capital in the coming years," said Song Ruixiang,

deputy director of SEPA. "The cooperation will also contribute to upgrading China's relatively backward technology in the sector."

China's environmental protection industry mainly focuses on the production of environmental protection machinery, treatment and recycling of solid waste, and curbing water and air pollution. But due to outdated technologies, a large proportion of the country's key environmental protection equipment comes from imports.

The report said that the priority in China's environmental protection for the next few years would go to four areas: development of urban sewage treatment systems; equipment to curb air pollution; solid waste disposal; and equipment to monitor the environment.

China plans to introduce 4 billion dollars into environmental protection during the Ninth Five-year Plan (1996-2000), according to the report.

## State Publishes Key Projects

By Sun Shangwu

[China Daily: 5/18/99]

The list of 102 State-level key construction projects planned for the year was published yesterday by the State Development Planning Commission.

Eleven projects—within the water conservancy, railways, hydropower and urban construction sectors—have been approved by the commission.

Construction of the remaining 91 projects is under way and will continue throughout the year, indicates a commission spokesman.

The commission, however, did not provide cost details of these "State key construction projects." The State will be the primary financier of these initiatives.

The renovation and construction of China's rural electric power grid is included in the list. It is expected to improve the functioning of the nationwide grid, reduce wear and tear during

transmission of electricity and cut power prices in rural areas.

Farmers usually pay more for electricity than urbanites, which has deterred rural residents from purchasing various electrical appliances.

The central government hopes to stimulate economic growth by expanding domestic demand and invigorating the vast rural market.

The transportation network project in Shanghai and subway construction in Shenzhen are among the key projects.

The commission is encouraging citizens to report contractors committing malpractice while working on the State's key projects.

The purpose is to "strengthen management of large construction projects, which receive State investments, and guarantee construction quality and effective use of State funds," the spokesman said.

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### **Energy Pricing Reform Initiatives**

China is beginning more serious efforts to curb air pollution by introducing new market mechanisms to cut coal use and rapidly promote natural gas use. Price controls will be lifted beginning in 2000, and Ma Shenyuan, a deputy division chief of the State Administration of Petroleum and Chemical Industries, has said they will be replaced by pricing formulas to protect suppliers and end-users while curbing abuse of monopolies. Natural gas use will be promoted through spending on infrastructure projects, tax breaks, preferential licensing and other measures, and the overall target for natural gas use has been set at 80 billion cubic meters by 2010 (up from the current 22 billion cubic meters). China is aggressively planning and building a network of pipelines, including development of a 55 billion RMB (US\$6.6 billion), 4,200 kilometer gas pipeline between the Xinjiang Uygur Autonomous Region and Shanghai by the China National Petroleum Corporation (CNPC) currently scheduled for completion by 2007. The US company Enron and the French companies Total and Gaz de France are currently aggressively exploring natural gas development opportunities—Total is building a site for receiving shipped liquefied natural gas in Guangdong Province, and Enron has recently signed a Memorandum of Understanding on pipeline construction. The coal industry itself is

already slumping, as coal output fell 16 percent last year from the previous year, and a campaign to close up to 250 illegal, inefficient and polluting coal mines will be continued.

Meanwhile, according to a new circular from the State Development Planning Commission, the focus of power construction will be shifted away from expansion of power generating capacity and more towards newer and more efficient technologies. A high priority will be placed on the development and use of locally produced equipment in all power generating projects, and projects that help curb pollution and improve the air quality. The government will speed up the elimination of small and old power generating plants, on top of the existing prohibition on construction of new small coal power stations, within the coverage of big power grids. Despite continued economic expansion, power shortages have been considerably reduced, which has largely been attributed to the elimination of older, more inefficient industrial capacity. At the same time, the SDPC appears ready to change the regulations governing power prices and rules for accessing the power market, and has stated, "The price for power should be lowered as much as possible, and incentives encouraging power use should also be made."

## China Launches Credit-Rating System to Boost Individual Loans

[Lateline News (*lateline.muzi.net*): 5/21/99]

SHANGHAI—China has taken the first step toward a national credit-rating system for individual bank loans, setting up its first credit-investigation company here, an official with the firm said Thursday.

A handful of municipal government departments joined hands with the Shanghai regional branch of the central People's Bank of China on Wednesday to jointly inaugurate Shanghai Zixin Co. Ltd., said the official, Zheng Cong, confirming a report in the Liberation Daily.

The firm's aim is to reduce bank risk in the newly opened territory of consumer lending and thereby expand the volume of such loans -- viewed in Beijing as essential to boosting consumption and economic growth.

Zheng told AFP Shanghai Zixin's "experimental" first year would pave the way toward the central bank's vision of a nationwide network of local credit-investigation firms that will share and maintain a central database.

Its revenue will "mainly will come from individuals," although banks will also pay a portion, she said, admitting that the system was immature and have to be perfected through trial and error

Current plans call for the establishment of a system within one year whereby consumers desiring bank loans must first obtain a "passport" certifying their creditworthiness from Zixin, she said.

The firm will keep files on each individual investigated, thereby allowing the banking system to "blacklist" those with poor repayment records, she said.

It had already made contacts with Hong Kong and overseas counterparts in the hope of learning from their experience and obtaining similarly advanced software.

The Shanghai central bank branch invested in Zixin via a company under its control, Zhonghui Financial Investment Consultation Co., the official added.

The central bank issued a dramatic circular at the start of March demanding all the country's banks "actively and steadily" begin consumer lending this year, especially loans for purchases of durable goods, housing and cars.

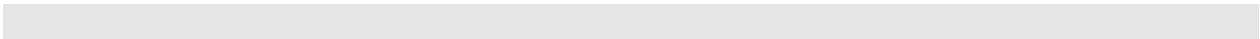
But analysts have said the complete inexperience on the part of Chinese commercial banks at assessing risk for such loans leaves them with little incentive to comply.

## China's Research Institutes to Face Commercial Reality

[*Financial Times*: 5/28/99]

Over two-thirds of China's 242 state-run technology research institutes will be slowly introduced to a new commercial reality starting in July when Beijing begins to wean many of them off the government payroll. The move may present opportunities for foreign companies seeking research and development links in China, and for venture capitalists searching for research that may have commercial potential. Funds for each institute's operation and pension obligations, but not payroll, will continue to be provided by the state. The institutes form the backbone of China's state industry research effort, but many have suffered the same

afflictions as the state-owned industries they served - a lack of incentive for creativity and hard work, overstaffing, poor management and flexible accounting standards. Many state research institutes in Beijing, hit by a lack of funding, have been looking for foreign partners. The decision to turn the institutes into commercial operations may allay some of the foreigners' concerns over fuzzy rules on the ownership of intellectual property and on how to share revenue from commercialized research. The proposed opening of a stock market technology board in Hong Kong later this year may also help attract venture capital.



## China Spends One Percent of Budget on Environment

[PACE ([www.chinaenvironment.net](http://www.chinaenvironment.net)): 6/15/99]

China invested 1% of its national budget on environmental protection last year, more than any other developing country, Xie said (Renee Schoof, AP/Boston Globe online, June 15). But counting the cost of sick days and health care related to pollution-induced diseases, as well as

the amount of forests and farmland being lost to ecological degradation, the World Bank estimates the costs of environmental damage to be equivalent to 8% of China's Gross Domestic Product, "effectively canceling out" the country's economic growth.

## China's Environmental Degradation Continuing

[Lateline News ([lateline.muji.net](http://lateline.muji.net)): 6/15/99]

BEIJING—Pollution and ecological degradation continue apace in China with government "greening" measures so far failing to produce results, the country's leading environmental official said Tuesday.

"China is still facing a serious environmental situation," Xie Zhenhua, minister of the State Environmental Protection Agency was quoted by AFP as saying.

"The situation of environmental pollution in a great number of regions has not changed, with some areas even worsening.

"China's ecological environment is extremely fragile, with soil erosion, desertification, receding forests and grasslands and other ecological problems relatively prominent as the scope of ecological destruction widens."

Citing his agency's 1998 annual report on the Chinese environment, he continued: "In 1998 serious natural disasters including floods, red tides and violent sand storms all occurred."

According to the report, major indicators showed pollution emissions in China began decreasing slightly in 1998, although overall emissions remained high.

While industrial waste waters fell by five percent nationwide, household sewage rose by 2.6 percent over the previous year.

Sixty three percent of waters tested in Chinese rivers only met class four on China's six-tiered water quality scale.

Water quality in Taihu Lake in central China, Dianchi Lake in Yunnan and Chao Lake in Anhui Province continued to register at the fifth level or below as algae growth caused by fertilizers and soaps continued to choke the lakes.

Sulphur dioxide and ash emissions, mainly from coal use, decreased by 7.8 percent and 7.7 percent respectively from 1997.

But acid rain in major Chinese cities fell 53 percent of the time it rained and 73 percent of the time in south central cities, according to the report.

Taiyuan, Shanxi Province, in the heart of China's coal belt, and Beijing continued to have the worst air quality in China with air pollution worsening in 1998, the report said.

"Beginning from last winter, the Beijing municipal government has taken 46 measures to reduce pollution and expects air quality to begin improving by October 1, show obvious improvement by the year 2000 and reach level two air quality by 2002," Xie said.

Air quality was also poor in Urumuqi, Lanzhou, Chongqing, Jinan, Shijiazhuang, Qingdao, Guangzhou, Shenyang, Tianjin and Xian, according to the report.



## Environmental Activism in China

By Wen Bo

[PACE: 6/1/99]

### 1. THE BEGINNING OF ENVIRONMENTAL ACTIVISM

The appearance of environmental activism in China can be traced back to the early 80s. Compared with today, the environmental situation in the early 80s was still relatively good. Thus people were not too aware of environmental hazards. However, this period was also a very liberal era following the introduction of reforms in 1978. Western thoughts were welcomed and introduced to the Chinese public, as were environmental concepts. Many international environmental activities were publicized in the Chinese mainstream media. And this information served as primary environmental education materials for the Chinese public.

At the same time, Chinese people had been learning lessons from past ecological wrong doings. Since the early 1980s, more and more people have shown interest in environmental issues and have begun to participate in environmental actions.

In 1984, China also set up its national environmental newspaper, China Environment News, which was a vanguard in promoting environmental awareness in Chinese society. Besides writing letters to the editors, individuals and groups also contributed stories that highlighted problems and local successes in environmental management.

Since 1984, Earth Day (April 22) and World Environment Day (June 5) have been widely celebrated in major Chinese cities. And Environmental Protection Bureaus have established Environment Communication and Education Centers at national, provincial and city levels to promote environmental awareness through non-formal education and public activities.

A few dedicated environmentalists also organized their own environmental groups, such as in Dalian, where high school students organized the Dalian Middle School Environmental Society, and in Beijing, where a journalist of the China Environment News worked on establishing a Green Cross group.

However, the most popular form of public environmental activities were still "Summer Nature Camps" which were mostly designed for

students, and roadside exhibits of environmental pictures, cartoons and information which were put on by different institutions.

### 2. THE DEVELOPMENT OF ENVIRONMENTAL ACTIVISM

From the widespread publicity of environmental demonstrations in the industrial nations during the 80s, Chinese students learnt much about non-violent protest and disobedience. This was one of important factors which contributed to several student movements in late 80s.

Many of the early environmentalists were involved in the 1989 democratic campaigns, and banners appealing for environmental protection had appeared in the mass demonstrations. The tragic end of 1989 incident also greatly slowed down activities in what had been a growing environmental movement.

Until the summer of 1991, environmentalists had been rather quiet, except for a few dedicated ones working on a smaller scale, who were trying to avoid attention from authorities.

In June, 1992, with the Earth Summit that was held in Rio de Janeiro, there was again a widespread coverage of global environmental events. During the conference, many Chinese participants in the NGO forum interacted with western environmental groups and established contacts for future exchanges.

China saw the establishment of several NGOs during the period, such as the China Biodiversity Protection Foundation and the China Council for International Cooperation on Environment and Development.

The Earth Summit in 1992 offered a chance for the post-Tiananmen government to return to the world stage. As confidence was building up over time, the government started to tolerate a certain degree of autonomous campaign activities.

Understanding that groups have a stronger voice than one or a few individuals, Chinese environmentalists also started to form groups that aggregated their interests and dealt with issues collectively.

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# G E N E R A L

*(Environmental Activism continued)*

## A. Student Environmental Groups

Student environmental groups in many Chinese universities have been established. Generally, these campus-based activities fall into one of the following four categories:

Many environmental clubs were established as extracurricular study groups. These type of clubs are mostly in environment-related schools or departments, and have the support of their departments and school authorities. Most of the current student clubs in China are of this type. Two well-known examples are the Environmental and Development Society of Beijing University, which is a student club under the College of Urban Environmental Sciences, and the Environmental Volunteer Association of Sichuan Union University, which is under the university's School of Environmental Sciences.

A second type of student organization are those that were started by students following the suggestion of their teachers. While their teachers may not belong to environmental studies departments, they often talk about environmental issues in their classes and encourage their students to organize themselves. One example of this sort of group is Children of Nature at the Hebei Economy and Trade University. This type of groups tend to be vulnerable in that they usually do not exist for very long without the continuous support and assistance of the teachers.

The third type of clubs are those that were initiated by students. The students involved may have little background in environmental studies but they are very enthusiastic. These groups are the product of rising public environmental awareness and determined social responsibility. Unlike students of environmental majors, these students tend to be more idealistic and aggressive, and are sometimes very good at mobilizing fellow students to participate in their activities. These groups include the Green Society of the University of Foreign Trade and Economy, the Green Shield of Beijing Science and Technology University and Green Earth of Chongqing University.

The fourth type of student environmental groups are those formed out of outdoor activity clubs. These clubs were originally formed for organizing outdoor activities such as mountain climbing, wilderness exploration, etc. The members of these clubs are usually nature-lovers and tend to be supportive of environmental issues when they learn more

about them. In recent years, many such outdoor clubs have shifted their focus towards more environmental issues. The Snow Bird Society of Beijing Industrial University and the Scientific Exploration and Outdoor Club of Beijing Forestry University are two examples of this last type of student environmental groups.

## B. Other Political Parties

In recent years, there is a growing involvement from democratic parties other than the Communist Party of China (CPC) in environmental efforts. There are eight democratic parties in China, which were established before 1949 when the CPC came into power. Jiu San Society has integrated poverty alleviation efforts with environmental issues. It has organized two conferences on sustainable development of Southwest China in 1989 and 1992. In 1991, the Society set up a model eco-farming site in Chi Feng of Inner Mongolia. And in 1992, it lobbied Chinese government to set up ecological protection areas at upper reaches of the Yangtze River.<sup>1</sup>

These political parties also serve as a channel for direct access to top Chinese leaders. Many ecologists have used this channel to bring certain environmental issues to the attention of top leaders. For example, Beijing University's giant panda research group was seeking the support of the central government in saving the giant panda and its habitat, so they wrote a petition letter to China's top leaders that was submitted by the China Democratic League. China Democratic League also provided meeting space for a Beijing environmental group, Friends of Nature, on several occasions to support their activities.

Recently, the China Association for Promoting Democracy (CAPD) has moved beyond just supporting other organizations' initiatives. The Hebei Provincial Branch of the CAPD recently set up a Green Committee to focus on environmental issues. The CAPD's Central Committee has declared its support for such a move during its national meeting on December 10, 1998.

The Chinese People's Political Consultative Conference (CPPCC) is a forum for many non-CPC members to participate in policy-making, including those related to the environment. In 1996, there were 40 bills on environmental issues were put forward by the CPPCC.<sup>2</sup>

*(Continued next page)*

*(Environmental Activism continued)*

## C. Environmental Groups Outside Beijing

Most of the attention on China's environmental activism has been focused on environmental groups and activists based in Beijing, however there are a number of environmental organizations outside Beijing which do not usually get the attention they deserve.

Friends of the Earth Guizhou Environmental Education Base was established by an ecologist Yang Jiongli, former vice-director of Guizhou Provincial Environment Protection Bureau, and Xiao Jinyuan, director of Institute of Geography with Guizhou Normal University. The organization is an independent environmental organization registered under the Guizhou Provincial Education Commission, which aims to educate the public on the ecological situation in Guizhou Province and to promote public participation. The group has organized a number of bird-watching activities for primary and high school students, and conducted several eco-tours in the province. It has also set up four environmental education bases in the provincial capital, Guiyang.

Green Salon is a new environmental group made up of concerned professionals in Guangxi Zhuang Autonomous Region. It has organized several salons and environmental surveys in Nanning, the region's capital. As the founding members are well connected and active in the city, the group has managed to get the support of the local media in letting the residents of Nanning know that it exists.

Some of the other regional environmental groups mainly focus on the conservation of a specific species and its habitat or on environmental issues that are local in nature. Examples of the former include the Swan Protection Association of Rongcheng which was organized to save swans wintering at Chengshanwei Swan Lake and the Panjin Saunders' Gull Conservation Society which has been trying to protect the Saunders' gull and its wetland habitat. An example of an organization with a strictly local focus is Green Home in Xuzhou City (Jiangsu Province) which has been organizing a few small scale activities such as the recent "Clean Up Yunlong Lake" campaign.

## 3. THE IMPACT OF CURRENT ENVIRONMENTAL ACTIVISM

### Promoting Citizen Participation—

The Chinese government has long claimed environmental protection as its national policy. However the government has not been very successful at mobilizing public participation in efforts to deal with current environmental challenges.

In the past, since ecological destruction was mostly large in scale, the public felt it was beyond their abilities to combat serious environmental problems. However, as China's economy develops, more and more environmental problems have started to affect everyday life. People have gradually realized the link between their daily consumption behavior such as the use of plastic bags and disposable chopsticks, and larger environmental issues such as hazardous waste and the logging of ancient growth forests. As some environmentalists started to campaign against these "wasteful" consumption patterns, people began to realize they too can make a difference by doing some simple things.

### Building Up a Civil Society—

In working to solve environmental problems, people will usually have to deal with some branch of government—be it local, provincial, or central. Rarely can one single person succeed in such efforts and so groups of residents with common concerns are starting to work together. On November 21, 1998, 181 citizens of Changchun organized together to file a law suite against the Changchun Environment Protection Bureau for its failure to fulfill its duty of closing a factory that was polluting water in the Xixing Reservoir.<sup>3</sup> The formation of citizen groups and grassroots environmental organizations, together with other independent social-economic groups, has become a sign of an emerging of civil society in China that is helping to build up democratic infrastructure.

### Solving Specific Environmental Problems—

Through efforts of dedicated environmentalists, China's nascent environmental movement has achieved several victories. Two examples are:

a) Separation and Recycling of Garbage: Before 1996 when environmentalist Dr. Li Hao started a model campaign to separate garbage, the residents of Beijing had heard little about separation and recycling of household garbage. Dr. Li Hao wrote letters to city officials as well as numerous articles for newspapers and magazines. She also helped several

neighborhoods as well as a government  
building compound in Beijing set up a system

*(Continued next page)*

# GENERAL

*(Environmental Activism continued)*

for separating garbage. The practice immediately caught the attention of television, radio and newspapers. Widespread publicity on the initiative encouraged citizens of other communities and other cities to follow the example.<sup>4</sup> These efforts have not only helped in the recycling of garbage but have, perhaps more importantly, raised citizens' awareness of the amount of waste urban residents produce.

b) Cut Cards, Not Trees: As many companies are now sending Christmas and New Year cards for commercial advertisement, Friends of the Earth started a "Cut Cards, Not Trees" campaign in 1995 in Hong Kong. This campaign was echoed in China at the end of 1997 by the China Green Students Forum. Last summer's Yangtze flooding made many Chinese realize the value of trees and importance of nature conservation. Following this, university students launched the campaign again in 1998 to persuade citizens to reduce the number of cards that they purchase and send. At the end of 1998, the campaign was successful in curtailing the sales of greeting cards during the holiday season.<sup>5</sup>

#### 4. THE CONSTRAINTS ON CURRENT ENVIRONMENTAL ACTIVISM

Compared with the enormous environmental problems that China is facing, the environmental activism in the country is still rather small scale. Though the Chinese government has a massive network of environmental departments, lack of initiative and efficiency has made these agencies impotent in the face of many environmental problems. But non-governmental groups are still not strong enough to slow the rapid trend of environmental degradation. Some of the challenges they face include:

a) Lack of Institutional Support: As China does not have a tradition of NGOs, it is difficult to sustain environmental NGOs, especially from a financial point of view. There are currently a very limited number of channels for small NGOs to apply for project and activity support. The majority of charitable foundations in China today raise money for their own activities and they rarely give their funds to outside groups.

b) Lack of Coordination Between Activists and Experts: Newly established citizen and student groups have enthusiasm for environmental activities, but these grassroots groups lack the specialist knowledge and understanding of environmental issues. At the same time,

scientists' groups, such as the China Ornithologist Society and China Botanical Society, which mostly consist of Chinese ecologists, are concentrate more on research and seldom organize public outreach programs.

c) Lack of full-time activists and need to be institutionalized: Being an environmentalist is still not a profession in China. Most non-governmental environmental activities are organized on a voluntary basis. Only a handful of people involved in environmental groups are able to devote a lot of their time to organizing and participating in activities. Thus the scope of some environmental activities has largely depended on the availability of time and money. Unfortunately, many of these environmental NGOs have mainly relied on a few devoted leaders for their continued operation.

d) Unstable organization, with uncertain future: Given the current situation in China, environmental groups are still facing an uncertain future. The Chinese authorities tolerate the current environmental activism largely due to the moderate nature of these groups. But new regulation on registration of social groups issued in November 1998 has made it more difficult for establishment of independent organizations. At the same time, as most of existing environmental groups, both those registered and unregistered, lack legitimacy and credibility, the development of these groups will depend on their own performance.

#### 5. FUTURE TRENDS FOR ENVIRONMENTAL ACTIVISM

Stronger emphasis on environmental education and raising awareness: As public environmental awareness is still low, the current environmental strategy of Chinese environmental campaigns will for a long time focus on raising awareness, not only of general public, but perhaps more importantly of policy and decision-makers.

Increasing interest: As living standards are improving, an increasing number of people will take actions to improve their quality of life. Where there are people who have started organizing groups, and where opportunities to participate exist, people will join environmental activities. And as people from different social circles begin to participate, environmental groups will start to have many different faces.

*(Continued next page)*

# G E N E R A L

*(Environmental Activism continued)*

Getting younger: Newspaper surveys shows global environmental issues have become one of top concerns for Chinese university students, along with government corruption, employment and social ills.<sup>6</sup> Another survey of high school students has shown that environmental issues have become the top concern for these young people.<sup>7</sup> Students are ready to absorb new ideas and concepts. With relation to the environment, they are always quick-learners. As the younger generation is becoming more aware of environmental problems, Chinese campuses are witnessing numerous budding environmental clubs.

Going on the Internet: The new generation of environmentalists has been quick in employing the Internet for information sharing and publicizing their environmental convictions. A few individuals and groups, such Greener Beijing and Green Earth Village, have put up their environmental web sites. And many more are constructing their web sites in cyberspace for promoting understanding of their activities and to attract support.

Possibly more aggressive and maybe confrontational: As new generations of young people did not grow up in the shadow of the Tiananmen incident, they are more likely to challenge environmental problems and certain government policies. As China's environmental situation deteriorates further, very possibly the country will see more direct actions such as dramatic protests from young people. However these protests would not challenge the legitimacy and authority of the CCP, but would more likely be focused on the actions of certain government departments, environmental offenders or local governments.

## CONCLUSION:

Facing a reality of worsening environmental situation and tremendous economic losses that have accompanied it, the Chinese government is now realizing the need to address the problems. However, for many of the "remote" environmental problems (e.g., the loss of bio-

diversity, destruction of habitats, poaching and smuggling of endangered species) which do not immediately affect people's lives as much as water and air pollution, there is still the need for more attention from the authorities and environmental activists.

Presently the establishment of any independent political parties is not possible in China, so environmentalism will take some time to enter mainstream politics. The formation of a Green Party in China at this stage would raise concerns in the government and very possibly cause officials to misunderstand China's nascent environmental movement and might jeopardize its future.

## Endnotes:

1. Wei, Guo. Jiu San Xue She shi huangji baohu wei jiren, (Jiu San Society views environmental protection as its own responsibility). Zhongguo hujing bao, (China Environment News). January 14, 1993.
2. Page 211, 1997 Zhongguo huanjing nianjian (China Environmental Yearbook 1997), China Environmental Yearbook Inc. 1998.
3. Ming, Huang and Wang Shiming. 181 villagers suing Changchun Environmental Protection Bureau. Gongren Ribao, (Workers' Daily), December 27, 1998.
4. Jun, Liu. Dr Globe works for the world. China Daily. December 4, 1997.
5. Yinglang, Liu. Greetings cards fall out of favor because of environmental concerns, China Daily, December 20, 1998.
6. See Daxuesheng zhui guanxin shenmo? (What are university students' top concerns?), Zuojia wenzhai (Writers' Digest). November 4, 1998.
7. See Zhongxuesheng guanxin huanbao, (Middle school students care about environment). Shaonan Shaonu (Boys and Girls). December 1998.

**G E N E R A L**



**Expert Wins Award for Environment Protection**

By Zhu Baoxia

*[China Daily: 6/18/99]*

## R E N E W A B L E E N E R G Y

**China Renewable Energy Project Gets Funding From World Bank***[AWEA Wind Energy Weekly #853: 6/28/99]*

The World Bank has approved a \$100 million loan and a \$35 million grant from its Global Environment Facility (GEF) for the Renewable Energy Development Project in China.

The project will use wind power to provide additional electricity to communities that are already electrified, and solar for electricity in isolated rural areas in northwestern rural China, according to the World Bank.

Construction and operation of wind farms is planned at five selected sites. The power generated will be channeled to local communities in four regions—Inner Mongolia, Hebei, Fujian and Shanghai—at the provincial level.

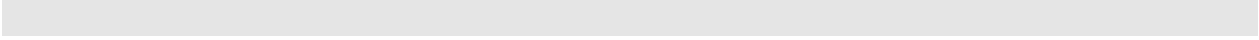
Powering economic growth while protecting the environment represents a critical challenge for China. The nation's reliance on coal—China consumes about 1.4 billion tons of coal each year and is the second largest emitter of carbon

dioxide emissions after the United States—is severely damaging air quality and causing acid rain. Construction of the Three Gorges Dam, the world's largest and most controversial, has been hampered by cost overruns, accusations of corruption, and opposition within China and abroad for its massive environmental and social impacts. To meet the energy demand of fast-growing provinces such as Shandong, Zhejiang, Jiangsu, Shanghai, Fujian and Guangdong along the eastern and southern coasts, Chinese planners have also initiated an ambitious and costly program to build 40 to 50 nuclear power plants over the coming decades.

China has yet to significantly tap its vast wind resources, concentrated in the north of the country stretching from Xinjiang in the west to Inner Mongolia in the east, as well as along the coastal region of the East and South China Seas. Production of electricity from wind would provide a clean, safe and affordable energy alternative to smaller coal-fired plants used to generate electricity in most of the country, and



to some of the nuclear power plants being considered for the southern and eastern coastal regions.



## Nations Can Curb Carbon Emissions, Still Grow

By Patrick Connole

[Reuters: 6/21/99]

WASHINGTON - Developing nations can grow their economies at the same time they curb dangerous greenhouse gas emissions, according to a report from the Pew Center for Global Climate Change late last week.

The findings detail how countries like India and China can choose alternative paths for building new power generation capacity, which limit carbon dioxide and other emissions without impeding economic growth in the next two decades.

"This study shows that developing countries do not have to choose between protecting the environment and ensuring their economic future. They can do both," said Eileen Claussen, executive director of the Pew climate change organization.

Countries can achieve the mix by including the cost of electricity delivery, not just generation, when making planning and investment decisions, cutting carbon emissions by up to 2.5 percent.

Other steps call for increased privatization of the electricity sector to bolster economic benefits by 5 percent, greater usage of natural gas and renewable fuels like wind and solar to cut emissions by 25 percent and increasing the efficiency of supply and demand for reducing carbon emissions by up to 10 percent, the report said.

Current projections show a near tripling of carbon dioxide emissions from electric power in developing nations over the next 20 years, which represents 10 percent of all projected emissions.

The role of developing countries in any eventual international treaty on climate change is a sensitive subject. The United States feels developing economies must participate in curbing emissions, and not leave the industrialized nations to go it alone on emissions cuts.

Talks to finalize the Kyoto Protocol on climate change have focused on implementing a general outline negotiated in 1997. That plan would have industrialized countries cut greenhouse gas emissions by an average of 5.2 percent below 1990 levels over the 2008-2012 time period.

Scientists believe that such gases cause global warming, raising temperatures which threaten public health and the future environmental structure.

The Pew Center was formed in 1998, and its Business Environmental Leadership Council is composed of 21 major, largely Fortune 500 companies working on climate change.

## China Steps Up Closure of Small Power Plants

[Reuters: 5/28/99]

BEIJING - China's State Council, or cabinet, has ordered local governments to speed up the closure of small power plants, the China News Service reported yesterday.

Single unit plants with a capacity below 25 MW should be shut down by the end of this year while all plants with a capacity of less than 50 MW should be closed by 2003, it quoted a State Council notice as saying.

Power grid enterprises should not buy electricity from plants due to be closed and banks should not lend to them, it said.

Closure was important to optimise the power industry structure and cut electricity prices, it said without giving further details.

China has said hundreds of air polluting small thermal power stations with a total of 10,860 megawatts of installed capacity will be closed.

Small power plants helped ease a power shortage in recent years, but were now viewed as obstacles to development, pushing up prices and creating pollution problems, officials have said.

## China's Guangdong to Shut Down Small Power Plants

[Reuters: 6/25/99]

China's Guangdong province has worked out a plan to shut down low-efficient and air-polluting small power plants last week, Chinese sources said yesterday.

There was no timetable but sources said the plan was targetted at some 30 small oil-fueled generators with capacity below 50,000 kilowatts with a combined capacity of 1.42 million kilowatts.

The power plants, mostly run by local government at county levels, were operating under high cost and considered a major source of air pollution as most burned high sulphur fuel oil.

The plan called for greater use of environmentally-friendly nuclear, hydro and natural gas to replace fuel oil.

But industry sources said the plants were unlikely to be out of business shortly.

"It could be a tough job, as most of them are built by local governments, and some are even joint ventures," said an industry source.

But sources said the small plants had a slim chance of surviving due to increasing price competition in an already oversupplied market, as well as government's price controls.

Guangdong's government recently slashed electricity prices under mounting protests from agricultural end users.

Industry sources said the cuts had resulted in very tight profit margins for small power plants.

## L.A. City Officials to Visit China as Guests of State Power Corp.

[Los Angeles (Business Wire): 4/16/99]

Los Angeles Department of Water and Power (DWP) General Manager David Freeman and City Councilmember Jackie Goldberg will travel to China next week at the invitation of the country's electric utility, the State Power Corp. of China.

The purpose of the visit is to meet with government officials to discuss the transformation of government power utilities into competitive enterprises; to promote the use of renewable energy generation as a means of cleaning the environment; and to exchange information on water treatment and conservation issues.

"The State Power Corporation of China is interested in the California experience as they relate to transforming a government-owned utility into a competitive, efficient enterprise. That is exactly what we are doing at the Los Angeles Department of Water and Power," Freeman said.

"That mission will also provide the opportunity to create an ongoing exchange on important electric generation and water quality issues, as well as business development for local environmental technology companies."

Goldberg, chair of the City Council's Personnel Committee, will discuss how the transformation of a public utility impacts personnel issues. "I look forward to meeting with government officials to exchange information on management restructuring in the public utility sector and to explain the success of the joint labor/management committees throughout the city that have been formed to improve labor relations," Goldberg stated.

She added, "The DWP joint labor/management committee offers an excellent model that can be applied anywhere. We have a great deal to offer the Chinese government since the DWP, working with the Personnel Committee, has successfully created a plan to compete with private sector utilities."

## Green Auto Technology Sees Boom as China Gets Tough on Pollution

*[Lateline News (lateline.muzi.net): 6/20/99]*  
 SHANGHAI - Green technology took centre-stage at China's just-closed megashow Auto Shanghai '99, as government policy this year displays unprecedented determination to beat back the air pollution choking the country's cities, AFP reported.

Vehicle manufacturers touted cleaner-burning, more efficient engines, while leading US and German producers were out in greater force than ever before to show off state-of-the-art catalytic converters and other emissions-cutting devices.

Michael Dunne, the president of industry consultancy Automotice Resources Asia Ltd., called it "a strong showing of environmental technology ... a response to a directive from Beijing high up that it's time to clean up China's air."

Beijing -- one of six Chinese cities ranked by the World Health Organisation among the 10 most polluted on earth -- banned sales of new cars lacking electronically controlled fuel injection systems and catalytic converters from January 1.

Shanghai and Guangzhou are expected to follow suit before the end of the year, and the standards are set to become a nationwide standard next year.

"It's the most significant development in the auto industry in the last 12 months," Dunne said.

"What's most dramatic is China's determination to put in a very aggressive policy in an aggressive timeline," he said.

Just two years ago, most foreign observers expected several years to pass before Beijing would slowly begin introducing emissions standards, he said.

But already the State Environmental Protection Agency "has become very active and aggressive in demanding world-class standards," he said, adding: "The trend is clear ... it's not one they are going to go back on."

The analyst said the Beijing fuel-injection requirements had already shunted the Mitsubishi Alto -- a sub-compact prevalent in the market -- and sedans made by domestic

maker Red Flag out of the capital's new vehicle market.

The engine requirements add as much as 10,000 yuan (1,205 dollars) to the sticker price of a new car, according to some estimates.

But Dunne said the cost impact would unlikely to have much impact on industry sales as a whole.

"It's a small percentage ... I think most buyers can live with it," he said.

Some 70-80 percent of the cars sold on the country's market go to companies or institutions, and top-selling domestic models are priced between 180,000 and 360,000 yuan (21,687 and 43,373 dollars).

Widespread use of coal for power-generation and heating in China is the number-one air pollution culprit, but fast-rising numbers of vehicles are blamed for a worsening of the situation in the last few years.

The nearly 1.5 million vehicles on Beijing's roads account for 80 percent of lead emissions, 63 percent of carbon monoxide and 37-50 percent of nitrogen oxide clogging the capital's air, according to official figures.

Western carmakers say the majority of Chinese cars boast emissions standards equivalent to vehicles sold in the United States and Europe in 1970.

But the analyst said an equally important reason behind China's damaging vehicle exhaust is the poor quality of petrol sold in the country.

Fuel reforms are also needed in addition to better engine technology, he said, adding: "They're moving in that direction."

The issue is however much more economically sensitive and difficult for the government to address, he said.

"They don't want to shock the economy with a sudden increase in fuel costs," he said, adding that higher standards would hit commercial trucking, farm-machinery operators, industry and many other key sectors not directly linked to urban pollution hard.

*(Continued next page)*

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# T R A N S P O R T A T I O N

*(Green Auto continued)*

Unlike car engine standards, which affect only one-time purchases, fuel standards would register in "constant purchases," he said.

Volkswagen AG, whose two joint ventures dominate the Chinese car market, launched a "diesel initiative for China" at the June 15-20 Shanghai car show.

The company displayed a Lupo model capable of consuming less than three litres of diesel per 100 kilometres (about 49 miles to the gallon), while US maker Ford spotlighted its 482 million dollar global investment in developing emission-free fuel cell engines.

## **Fuel Tax Rejected Again**

*[South China Morning Post, 4/30/99]*

Normally compliant legislators refused for a second time to approve the controversial Highway Law that would replace toll fees levied by local officials with a fuel tax imposed by the central government. The tax would raise fuel prices by over 50 percent. The rejection--short of passing by 1 vote--came as a snub to Premier Zhu Rongji and highlights tension between Beijing and regional authorities. Expecting the new tax to go into effect on June 1, tax authorities in Beijing this year only collected half of the 1200 yuan (\$144) annual road maintenance fee placed on automobiles and trucks. The aim of the amendments is to more rationally distribute the burden of highway costs among users, eliminate unauthorized collection of road fees by local officials, and

promote central government control over  
revenue.

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## Top Communist Officials Address Air Pollution

*[PACE (www.chinaenvironment.net)]*

"Despite huge investment and the relentless efforts of government and ecologically minded people, air pollution remains a bitter reality" in five of China's largest cities, reported the official Beijing China Daily.

Over the last few days, 11 "top" members of the National People's Congress discussed the issue with local officials, factory managers and ordinary citizens in Beijing, Shanghai, Lanzhou, Xi'an and Shenyang. The legislators noted that air quality has improved somewhat in all five

cities, as officials have worked to phase out coal burning, control vehicle emissions, plant trees and move heavy industry out of urban areas (Greenwire, Mar. 19).

Still, to help the cities make progress, the legislators "demanded" action by the State Economic and Trade Commission to promote research of pollution-control technology, "especially coal-desulfurization equipment" (Xu Yang, Beijing China Daily, June 1).

## Acid Rain Falls on One-Third of China

By Matt Pottinger

*[Reuters: 6/16/99]*

BEIJING - Acid rain falls on 30 percent of China's land mass, according to an official report on the Chinese environment released yesterday.

And one in 10 Chinese companies flouts environmental regulations.

"The environmental situation facing China remains severe," said the 1998 annual review of the environment unveiled by Xie Zhenhua, head of the State Environmental Protection Administration (SEPA).

The report highlighted some success in cleaning up major rivers, but said factories spewing chemicals and industrial waste were holding back real progress.

Coal dust laced with sulphur dioxide was the main air pollutant.

"Of all the enterprises in China, 10 percent exhibit backsliding and fail to obey the law," Xie told a news conference.

He said some parts of China falsified data to fool officials monitoring compliance.

Beijing was getting tough by holding local officials accountable and jailing severe

offenders. Factories were being helped to convert to cleaner—but more costly—production.

Water quality in the Yangtze, Huai and Pearl rivers had improved from 1997 and there was an overall reduction of sulphur dioxide, smoke and dust in the air, the report said.

But the waters of the Yellow, Hai and Songhua rivers had not improved from 1997, and the Liao river was dirtier.

A SEPA survey found most Chinese considered environmental pollution a "grave problem", but thought over-population, crime, education and unemployment were more pressing issues.

Eighty-six percent of Chinese believed environmental degradation was a result of "poor law enforcement" or "failure to obey the law".

Xie said China spent one percent of its gross domestic product on environmental programmes - the highest proportion of any developing nation.

Half the world's 10 most polluted cities are in China, according to the World Health Organisation.



## China's Capital Has Worst Air Quality

[Lateline News (lateline.muzy.net): 6/1/99]

BEIJING - Beijing is the most contaminated capital city in the world and one of the worst in China in terms of air quality, a Chinese legislator was quoted by Xinhua news agency as saying on Monday.

Qu Geping, chairman of the National People's Congress Environment and Resources Committee, made the comment after a fact-finding tour to five Chinese cities.

The air pollution index for May 7 to 13 showed that Beijing's air was 40 percent worse than Shanghai, one-third higher than Tianjin and 37 percent above Chongqing, the report said.

Coal-burning, auto emissions, dust storms and heavy industries contributed most of the pollutants in Beijing, said Qu.

Coal provided 70 percent of energy used in the capital, he said, adding that motor vehicles contributed some 63 percent of carbon monoxide and 50 percent of nitrogen oxide in the air.

Despite the 46 emergency measures to improve air quality -- including the banning of the use of coal in certain areas, removal of substandard taxis from the roads and the planting of more trees—the situation remained grim, it said.

The proportion of sulphur dioxide and carbon monoxide in air pollutants have fallen, compared to last year, it said.

The rising level of nitrogen oxide has also been curbed.

"However, the volume of floating particles continues to climb," said the report.

Shanghai, China's financial centre in the east, has sharply reduced its pollution index in recent years by introducing environment-friendly cars and planting more trees.

Despite this, acid rain has emerged as an increasing problem in recent months, said the report.

Shenyang, one of China's largest bases for heavy industry, has also witnessed some improvement in air quality despite increased coal consumption and ongoing economic development.

"Chinese cities will continue to face an uphill battle against air pollution and much more needs to be done to meet the demands of the general public," said Zou Jiahua, vice-chairman of the NPC Standing Committee.

The legislators tabled a number of proposals during the meeting including the designation of high population density areas in Beijing as "coal-free zones" and increasing production of automobiles which use gas as fuel, said the report.

Official records show that Beijing recorded 265 days of smog last year, with the sun shrouded by haze on two out of every three days during 1998.

# U P C O M I N G E V E N T S

## **The First Nongovernmental Organization Forum on U.S.-China Environmental Cooperation**

September 2-3 1999  
Marriott Hotel/Bethesda  
5151 Pooks Hill Road  
Bethesda, MD 20814, USA

The goal of the NGO Forum on U.S.-China Environmental Cooperation (the "Forum") is to strengthen communication and cooperation among U.S. and Chinese environmental NGOs. The Forum will mark the first time that many NGOs from these two countries will have the opportunity to discuss and formalize an action plan to facilitate and monitor further activities in this area in an informal and productive panel discussion setting. It will initiate an ongoing forum that will foster increased cooperation, partnership, and information exchange between the Chinese and U.S. environmental NGOs.

The Forum is organized jointly by the International Fund for China's Environment (IFCE), Professional Association for China's Environment (PACE), the Woodrow Wilson International Center for Scholars, Global Village of Beijing (GVB), and Overseas Chinese Environmental Engineers and Scientists Association (OCEESA).

The Forum will invite four keynote speakers from the U.S. and China:  
Geping Qu, the Chairman of the Environmental Protection Committee,  
the Chinese National People's Congress  
Congjie Liang, Chairman, Friends of Nature, China  
Jonathan Lash, President of World Resources Institute  
Roger Sand, Board Chairman of WWF-US

The Forum will consist of four panel presentations (NGO cooperation and development; legal aspect of NGO's operation; fund sources and fund raising; and public education and promotion) with emphasis on open participant dialogues and roundtable discussions. The Forum language is English with Chinese-English translation available.

The Forum participants will also have a privilege to attend the "21st Century China and the Challenge of Sustainable Development", a two-day symposium immediately following the Forum at the same location on Sept. 4 and 5, to discuss technical issues on water resource management, energy policy, environment and population, economics, and technological exchanges, etc. (see below).

Registration fee:  
Free for people from mainland China  
\$100 (NGO Forum only, including the banquet and lunch)  
\$180 (NGO Forum and the Symposium, including three banquets and three lunches)

For complete information and a registration form, contact IFCE before July 31, 1999  
at (703)-222-1280 (tel), 703-830-3951 (fax), or [luo.associates@erols.com](mailto:luo.associates@erols.com) (email)

## **Symposium Announcement: 21st Century China and the Challenge of Sustainable Development**

September 3-5, 1999  
Marriott Hotel/Bethesda  
5151 Pooks Hill Road  
Bethesda, MD 20814, USA

For complete information on the Symposium, please check  
<http://www.calink.org/WRSA99>  
or contact Dr. Yegang Wu, at 1-(800)-605-2765 or email: [ywu@sfwmd.gov](mailto:ywu@sfwmd.gov)