



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, China announced its intension to reach zero growth in energy consumption by 2040—announced by the China Sustainable Energy Program’s Senior Policy Advisory Council member Zhang Guobao, Vice Chairman of the State Development Planning Commission. Total energy consumption is projected to triple between now and 2040. However, China’s challenge, and the goal of the China Sustainable Energy Program, is to maximize the contribution of energy efficiency and renewable energy to reducing the public health and environmental footprint of China’s anticipated energy growth.

In a report entitled “China: Air, Land and Water”, the World Bank urged China to increase investment in conservation and environmental protection to keep pace with its economic growth (pg. 2). The Global Environment Facility (GEF) has granted China \$8.1 million to improve efficiency in power production, increase energy conservation, and support the China Green Lights Programme (pg. 4).

Page 8 features an article adapted from the Society of Environmental Journalists conference in Portland, Oregon describing the challenges of environmental reporting in China.

Shanghai’s Standing Committee approved a new air pollution law that is to take effect in 2002. The measure aims to reduce air pollution from industry, coal burning plants, automobiles, and ships (pg. 10).

Shougang Corp, a heavy contributor to air pollution in Beijing, will move its dirtiest plants out of Beijing and reduce steel production by a quarter to clear the air for the 2008 Beijing Olympics. The company will also begin to diversify into other areas of production to further reduce emissions by 2005 (pg. 11).

China’s restructuring blueprint for the power industry is expected to be released in the next several weeks. Proposed reforms include separating power generation from power transmission and distribution (pg.12).

To help spur investment and consumer interest in cleaner vehicles, China will cut the consumption tax for vehicles that meet emission standards equivalent to European standards (Euro II) (pg. 13). The State Environmental Protection Agency and the General Administration of Quality, Supervision, Inspection and Quarantine released two new regulations requiring diesel engines to meet emissions standards equivalent to Euro 1 standards by the fall of 2001 (pg. 13).

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Energy Use to Achieve Zero Growth

China Daily
 11 July 2001
 Fu Jing

China will achieve zero growth in energy consumption by 2040, according to Vice-Minister of the State Development Planning Commission Zhang Guobao.

The country needs to restrict annual growth in energy consumption to 2.5 per cent in the coming years, so as to achieve the long-term goal, Zhang was quoted as saying at Monday's senior forum on energy-conservation.

By 2040, China's total consumption of primary energy resources will rise by 300 per cent to equal 3.86 billion tons of standard coal, while the maximum domestic supply will be equal to 3.2 billion tons of standard coal per year.

China's proven reserves of coal, crude oil and natural gas account for 11 per cent, 2.4 per cent and 1.2 per cent respectively of the world's total.

The country's per capita volume of each of the three resources, however, is less than half of the world average.

It is therefore critical for China to address the supply bottleneck by improving the structure of its energy supply and increasing energy utilization efficiency, Zhang said.

The State Economic and Trade Commission and the Ministry of Finance jointly advocated that governmental organizations should play a bigger role in energy conservation and environment protection.

The call was made at Monday's forum which kicked off a national week-long publicity campaign to spur Chinese citizens' awareness of energy conservation and push for a sustainable development strategy.

"All governmental organizations should be active in saving energy and protecting the environment and promoting the purchase of products which are authorized as energy-efficient," said the official document.

Statistics indicated that governmental organizations and government-backed institutions in China spend 80 billion yuan (US\$9.6 billion) on electricity per year, which is 5 per cent of their total spending.

World Bank Urges China to do More on Environment

Reuters News Service
 13 August 2001

BEIJING - The World Bank has praised China for handling severe environmental problems in the past 10 years but warned spending on conservation lagged economic growth and urged Beijing to be more proactive.

"China has done many things right in the environmental area over the past decade, including large-scale afforestation and massive investments to reduce air and water pollution," it said in a report released late last week.

"But in many respects, economic growth in China is overwhelming investment in conservation and environmental protection," said the report entitled "China: Air, Land and Water."

Land degradation is worsening, forests are shrinking, water quality is deteriorating and the explosive growth in car use is becoming a significant new source of air pollution, it said.

"The 'one-size-fits-all' approach, as exemplified by various mass environmental campaigns, played a useful role in the past, but is provingly increasingly inadequate to meet current demands," the World Bank said.

China faced a number of challenges, including a complex environmental agenda too big for one government agency and budgetary constraints, it said.

The World Bank called for new institutional

arrangements for environmental protection, including the possible re-establishment of a super-ministry to coordinate work of different agencies.

China should also set up an independent, state-level body to manage nature reserves and create new and separate river basin management institutions, the World Bank said.

The government should boost spending on air and

water pollution alone to two percent of gross domestic product through 2020, compared with the 1.3 percent for all environmental expenditure set out in the state plan for 2001 to 2005, it said.

Beijing could also control pollution by requiring permits or licenses for all significant point sources - industrial and municipal - with required fees and enforced by punitive fines, the World Bank said.

Research Casts Doubt on China's Pollution Claims

Washington Post
15 August 2001
John Pomfret

BEIJING -- New studies have cast doubt on reports that China is significantly reducing the "greenhouse gas" emissions that help make it one of the world's major polluters.

Research by a Japanese scientist, funded by the World Bank, raises questions about Chinese statistics that show a huge reduction in production of coal, a fuel whose consumption contributes heavily to pollution here. And at a recent conference in Beijing, a Chinese scientist reported that China will revise upward its estimates for coal consumption for 1999, wiping out half the previously reported reductions.

Other research points to a serious underreporting of China's consumption of oil, another major pollutant.

China is the second-largest producer of greenhouse gases in the world, after the United States. Until the initial Chinese studies were released showing a drop in coal production and oil consumption, it was widely expected that China would surpass the United States by 2020.

The projected rise in pollution was thrown into doubt when researchers at the Lawrence Berkeley National Laboratory in Berkeley, Calif., reported in April that, since 1996, China's energy output had fallen 17 percent and its carbon dioxide emissions had fallen 14 percent, even though China's economy grew by 36 percent over the same period. Also in April, the European Union office in Beijing estimated China had increased energy efficiency by 50 percent and reduced coal use by 30 percent over the past five years.

The reports, which emerged soon after the Bush administration announced it was withdrawing from

the Kyoto Protocol on climate change, drew wide notice. They bolstered Beijing's arguments that if a relatively poor country like China could achieve major reductions in its carbon dioxide emissions, then richer countries should be able to follow suit.

But a report issued by the U.S. Embassy in Beijing this month called the statistical claims "greatly exaggerated," saying they fell "outside the realm of experience of any other country in modern times." The report concluded that China's greenhouse gas emissions "have dropped little, if at all."

Nobuhiro Horii, of the Institute of Developing Economies in Japan, looked at how Hunan province handled government orders to shut coal mines. He concluded that local officials told Beijing they had shut the mines, when in fact they kept them open. Interviews with officials in other parts of China led Horii to determine this to be a nationwide problem.

Horii added that it usually takes about a decade to increase energy efficiency. China's claims that it was making inroads into carbon dioxide production in two years, or even four, are not credible, he said. "This is just not possible," Horii added. "Yes, China is increasing energy efficiency, but they are doing it slowly, like everyone else."

The U.S. Embassy report noted problems with other statistics. The switch from coal to gas is not occurring in major cities as quickly as many in the government have said. Nor is the growth in hydropower replacing coal, it said. It also questioned Chinese statistics on petroleum consumption. Vehicle traffic in Chinese cities has been doubling about every five years. But official data show oil consumption rising just 11.4 percent from 1996 to

1999.

Zhou Dadi, director of the Energy Research Institute of the central government's State Development

Planning Commission, said that doubts about China's energy statistics are reasonable. "But regardless," he added, "we are clearly decreasing our coal consumption."



Grant Helps See Better Light

China Daily
22 September 2001
Fu Jing

China has landed a US\$8.1 million grant to help find more efficient ways to provide power and light.

The gift from the Global Environment Fund is expected to be matched by Chinese Government and private sector contributions to the effort.

"With the investments and technical help from the international organization, we will map out a plan to improve energy efficiency and lighting products," said Zhao Jiarong, director-general for resource conservation in the State Economic and Trade Commission (SETC).

Zhao announced the grant at a press conference yesterday, showing thanks to the involvement of the Global Environment Fund as well as the United

Nations Development Programme in the State's five-year-old China Green Lights Programme.

That project focuses on energy conservation, environmental protection and lighting quality improvements, which were top priorities of China's Ninth Five-Year Plan (1996-2000).

While the project has succeeded in some areas, China still needs active participation from international organizations to continue this important work.

Kerstin Leitner, China representative of the United Nations Development Programme, is confident that the programme will help improve the country's energy efficiency.



China: Witnesses to a Crisis

Far Eastern Economic Review
27 September 2001
Velisarios Kattoulas

FOR FIVE DECADES, China's leaders have repeatedly shaped and reshaped nature to serve their revolution. In the process, they have brought China to what many fear is the brink of an environmental catastrophe.

A revolutionary generation helped change the face of China--damming rivers, clearing land. Now, they look at their country's environment, and despair

Few men understand this better than Shen Zhaoli and Lin Pei. One built dams; the other helped--at least briefly-- to turn barren grasslands into lush fields. Today, in their 70s, retired and in the twilight of

distinguished careers, they look at China's environment--and despair . . .

Shanghai, 1949: Shen Zhaoli, a 19-year-old student, watches Mao Zedong's army enter the city. He's not worried. The troops are orderly, and in any case he's due to move away to Beijing to attend university later that year. Like his father before him, he plans to study engineering.

When he tries to enroll, though, Shen gets his first taste of Communist Party rule: The cadres have taken over admissions, and transferred him to hydrology. To eclipse the capitalist West, Shen is told, China

needs hydrologists to build dams. To Shen, this makes no sense. But after graduating in 1953, he becomes intimately familiar with this plank of Maoist thought.

Shen spends much of the 1950s and 1960s building dams. In one fairly typical year, he spends six weeks cruising on rivers in the southwest of the country, searching for spots to erect new dams. It is an experience he shares with many of his classmates. When Mao came to power China had 23 large and medium-sized dams. By 1980 it had some 80,000.

Mao saw dams as a pillar of development, Shen says. By supposedly controlling flooding, improving irrigation and increasing farm yields, they would free peasants to work in industry. All too often, though, Shen says the dams caused more problems than they solved. In many cases, farmland upstream became waterlogged and unusable. In others, the dams became clogged with silt, causing huge flooding. And then there were the collapses: According to Judith Shapiro's authoritative new book, *Mao's War Against Nature*, 2,976 dams had collapsed by 1980. In one incident, the 1975 Shimantan dam break, Chinese environmentalists estimate as many as 230,000 people died.

Long before crumbling dams become commonplace, Shen started to have serious doubts about Mao. "There was no epiphany," says Shen. "But travelling around China in the 1960s, seeing for myself what was taking place, I came to realize we were squandering our resources." Today, he doesn't flinch from pinpointing blame: "What Mao did to China's environment was unforgivable. It was ill thought-out and ultimately disastrous. We're still paying for his mistakes . . ."

Wuhan, 1949: Mao's army takes over the city with neither struggle nor fanfare. Lin Pei, the son of a rich businessman, gives the revolution little thought. His mind is on the chemistry course he plans to start at Wuhan University later in the year. When Lin tries to register, though, he discovers he is already enrolled to study land-resource management. In Lin's case, the origin of his unexpected change is another of Mao's ardent beliefs: With ample will even the thinnest soils can be converted into lush farmland.

After graduating, Lin travels to western China in 1953. The country's population then is around half the 1.3 billion it will reach by century's end. Vast areas are unknown wilderness. Lin spends a decade in Xinjiang ostensibly mapping the area. China's leaders will use his research to draw up plans for vast collectivized farms. At times, local leaders seek out

Lin's opinions. Most, though, ignore his warning that thin, marginal soil is unlikely to support intensive agriculture for long. Today, according to the Asian Development Bank, 28% of China is affected by desertification and 90% of its grasslands are moderately to severely eroded.

In spite of such experiences, Lin says he remained convinced of Mao's ultimate sagacity until the Lin Bao incident in 1971. According to the official account, Mao's handpicked successor was shot down in a jet over Mongolia after allegedly plotting to overthrow Mao. Says Lin (no relation): "Lin's death made me think 'what on earth is going on?'"

TODAY, LIN PEI is a slender man with carefully parted white hair and thoughtful eyes. He can look back on a career that saw him rise to become the head of the Department of Land Resources at the Beijing Agricultural University and a long-time consultant to the United Nations Food and Agriculture Organization. Although he will soon turn 73, he keeps up to date with land research in China, a subject on which he is a leading authority.

For his part, Shen Zhaoli became vice-president of the China University of Geosciences in Beijing, and a dean of its hydrology department. A barrel-chested tennis buff from Shanghai, he sports a mop of silver hair and playful eyes. Later this year he turns 70. But like Lin, he closely follows new research; in his case, into China's water supply.

Such experience notwithstanding, in the grand debate about China's escalating environmental woes--Will China surpass the United States to become the world's polluter-in-chief? Might its land and water shortages stall its economic development? Could the mishandling of its environmental patrimony break the party's grip on power?--few bother to seek out the opinions of Lin, Shen or their contemporaries.

In the twilight of their careers, no one really cares what these old men have to say. Perhaps they should. For one thing, because of the possible political implications of China's blighted environment, the government has yet--and appears unlikely--to sanction a comprehensive, independent survey of the problem. Moreover, whatever information is collected is distributed only sparingly.

By comparison, since Shen and Lin made their first field trips as undergraduates in 1950, almost without a break they have spent more than two months a year conducting research at environmental hotspots across China.

No less important, in assigning blame and highlighting solutions, Shen and Lin have no vested interests. Environmental merchants of doom in the West rely on the unremitting gloom of their prophecies to maintain the flow of donations that keep their self-styled think-tanks running. Foreign experts must take care to stay on the right side of Beijing. Otherwise, they risk losing access to the scant information they do get. For Chinese academics, criticizing the government too harshly can land them in jail, as opponents of the Three Gorges Dam have discovered.

By stark contrast, in retirement--and with most of their children teaching at top universities in the U.S.--Shen and Lin feel comfortable playing a role familiar to patriotic Chinese academics throughout history: Criticizing their nation's leaders to help them become better rulers.

FOR BOTH SHEN AND LIN, few places better symbolize China's environmental problems than Datong, in northern Shanxi Province, west of Beijing. The city has attracted visitors since the 5th century, when the Northern Wei dynasty built a huge complex of Buddhist grottoes in caves just beyond the city limits. However, when Lin and Shen first visited in the early 1960s, they were there not to catch the sights but to look for ways to help the city contribute more to Mao's revolution.

Neither man liked what he saw. Examining farmland on the outskirts of Datong, Lin found chronic soil erosion and extreme poverty--the after-effect of the Great Famine of 1959-61, which flowed from Mao's decisions to leave the 1958 harvest unpicked and to clear forests to create mega-farms and power "backyard" steel furnaces. Similarly, Shen found rivers polluted by a recent boom in coal mining; this was inspired by Mao's madcap idea that with sufficient coal China's steel industry could surpass Britain's in a year: the so-called Great Leap Forward.

During almost a dozen trips to Datong over the next 40 years, the two men watched its environment deteriorate alarmingly. Visiting in the mid-1970s, Lin found soil erosion so dire that farmers were starting to switch from farming vegetables for food to hardier crops such as sorghum and corn for fodder.

The last time either of them visited was in 1999, when Shen attended a conference there. By then, the environmental problems were acute. Nobody had seen fish in nearby rivers for a dozen years. The city's sole aquifer--an underground water source--was in a parlous state. When water is pumped from an aquifer

quicker than rainwater can replenish it, the water table--which normally runs parallel to the ground--sags to become what hydrologists call a "cone." At the lowest point of this cone, the groundwater is further away from the earth's surface than in the surrounding water table. It's rare for the gap between these two water levels to be much more than about 50 metres; in Datong, a recent study by Australian engineers showed it has reached 130 metres.

In a cruel twist, the 18 state-owned industrial plants responsible for most of Datong's environmental problems are now tapping the aquifer Datong relies on for drinking water, compounding its depletion. They no longer use local river water; in other words it is too polluted for the polluters. But their wastewater discharge pollutes the aquifer. Officials fear that if locals ever found out about the level of pollutants in tap water there could be "social unrest," according to an Australian environmental consultant who has just spent three months in Datong. The consultant adds that local officials believe that at current rates of consumption Datong's aquifer will run dry by around 2020.

Shen and his wife visited Datong's Buddhist grottoes after the 1999 conference, only to find the statues blackened by air pollution. The statues have since been cleaned, but Datong's environment has continued its steady decline. The soil remains unfit for growing vegetables. In a village north of Datong a farmer desperate for money planted a small plot with vegetables, which he planned to sell in Datong market. Miraculously, the vegetables survived. But they absorbed such large concentrations of pollutants that for two days the few people who ate them became numb below the waist.

To clean up their acts, the plants around Datong should invest in smokestack, water purification and other such technologies. But China lacks the cash to invest in such measures.

Shen and Lin argue such constraints leave Datong's politicians facing an unenviable dilemma. On the one hand, closing the plants would halt the city's environmental slide. However, with local unemployment at 10% and underemployment at 20%, politicians worry about straining the city's social fabric.

Conversely, allowing the plants to continue discharging untreated effluent carries the risk of not straining the social fabric but shredding it. Already, water, soil and air pollution are harming the health and productivity of Datong's 3 million residents. At

an industrial plant with 5,000 workers the rate of skin and lung ailments is chronic. Hundreds have rasping coughs year round, and many women employees have suffered spontaneous abortions. Chillingly, Shanxi Province alone boasts at least another 1,000 such plants. "Tackling such problems is going to be very, very hard," says Shen.

WITH SLIGHT VARIATIONS, Datong's woes are replicated across China countless times. According to the Asian Development Bank, soil erosion, desertification, salinization and alkalization now affect more than a third of China's territory. And in vast parts of northern China per-capita water resources have already dropped to 360 cubic metres a year--a third of the level the World Bank defines as water scarcity.

In the late 1990s, China's leaders started grappling with such problems in earnest. In part, they responded to international pressure. China's environmental slide has long wreaked havoc beyond its border; most recently in the American Midwest, where sandstorms originating in northern China harmed crops. More important, leaders realized their muddied environment had potentially thorny implications for unemployment, economic growth, and their grip on power.

"The government wants to solve environmental problems for a whole host of reasons," Bruce Murray, the Asian Development Bank's representative in Beijing, says cryptically.

With that in mind, and by the standards of the past half-century, China is now tackling its troubles with uncommon urgency. Since 1996 it has cut sulphur dioxide emissions. It has shut some of its worst polluters and it is drafting legislation to stem further environmental degradation.

While many environmentalists find hope in such progress, Shen and Lin find it hard to be optimistic.

"The way things stand today--especially in rural areas--at the very least it'll take 100 years to solve China's water problems," Shen says. Laughing ruefully, Lin calls himself an optimist. He figures reversing the damage to China's land could take as long as "200 years."

Why? To tackle its environmental crisis, Shen and Lin insist, China needs to accomplish a feat of social engineering unparalleled in human history: convincing 900 million peasants--who represent three-quarters of China's population but account for only 15% of its GDP--that protecting their environment will one day make them richer.

"In rural China--in other words, in most of the country--the peasants are blinded by the wealth they see along China's East coast," says Shen. "They want that for themselves. And they'll stop at nothing to get it, even if that means using land and water in a profligate way that ultimately slows the country's development. What can you expect? They're uneducated peasants."



New Battery Invented at Tsinghua University

*ERM China/EHS Review
August 2001*

New Battery Invented Researchers at Tsinghua University in Beijing have developed a new, environmentally friendly and highly efficient storage battery that can be widely used in communications, transportation, lighting and gasoline processing. Laboratory experiments show that the battery does not release harmful gas when in operation and its life expectancy is twice as long as normal batteries.

A New Role for Reporters in China: Revealing the Ecological Consequences of Economic Growth

Tompaine.commonsense

3 December 2001

*Liu Jianqiang writes for **Gold Sword**, a news magazine based in Beijing, and is a graduate student at Tsinghua University. He recently traveled to Portland, Oregon to attend the conference of the Society of Environmental Journalists.*

Editor's Note: This article was adapted from a panel presentation by Liu at the Society of Environmental Journalists conference.

My first trip to the United States took me to Portland, which I found to be a beautiful city. In the United States, the western part is scenic and peaceful, but in China, things are different. The west of China is poor, and the environment is deteriorating.

Last summer, I went to the western part of China to the ancient and mysterious area of Loulan, which was a very important empire on the Silk Road, an ancient trading route from China to Europe. There used to be large patches of forests and lakes in Loulan. But last year when I went, there was nothing left but a few hillocks. The area has nearly become a desert after long periods of drought, water shortage, and damage caused by humans.

The Loulan region is near the Gansu, a western Chinese province. In 1993, in LanZhou, the capital of Gansu, some farmers established a factory. The factory caused a lot of air pollution, and local residents took to the streets to protest; some people died in the violence. When interviewed by reporters, residents said, "We can't survive in that polluted air." But workers said they needed the jobs the factory provided.

China is a developing country. Economic growth is a priority. In the 1990s farmers set up many factories, including some notorious for polluting -- such as paper mills and cement plants. The economy improved but at the same time the environment deteriorated. An official from the environmental protection bureau of Chongqing told visiting journalists one day about a visit from the chief of state of a certain county. From far away, the state official saw the white foam of pollution on the Yangtze River and asked, "What's that?" Embarrassed, the environmental protection official answered sheepishly, "Ducks."

Today, the Yangtze River is severely polluted by waste from the cities, from the factories on both sides, as well as by the ships sailing the river. "You

will not sink even if you stand on the water because there is three-meter thick rubbish on the surface near Gezhou Dam," a senior official once said.

Around China's capital, sand storms have grown more common as urban sprawl and deforestation fuel the disappearance of trees and grassland. In April 2000, a sand storm hit Beijing and killed five people working on the top of a building. I was forced to stay home, and spent the day looking at the yellow sky with worry. "Will Beijing become another Loulan, the disappeared great city?" I wondered.

Environmental journalists can play a critical role in making sure this does not happen. In 1998, the Environment and Resources Committee of the National People's Congress (NPC), which is a part of the Chinese central command, organized dozens of reporters from several media institutions to go to Zhejiang Province to do some interviews. Tin factories dating back 600 years had dangerously polluted the environment. Residents and workers were constantly fighting. After reports by environmental journalists, several tin mines were closed. In 1999, after another series of reports exposing the situation, the government of Zhejiang Province was forced to close all the mines. It took only two years for the environmental reporters to help solve a problem that had existed for 600 years.

In China, there are environmental protection laws, and there are environmental protection bureaus. So why are things still dissatisfactory, and why are environmental reporters still badly needed?

The problem is that while the factories in China pollute the environment they are central to the nation's economical development.

In addition, Chinese officials are not elected, but are nominated by senior officials. The nominating officials judge whether candidates are likely to stimulate economic developments. Potential

candidates focus on how much tax they can collect, not on environmental concerns.

In my hometown, a paper mill polluted the groundwater of the whole city but the head of the guilty factory was still considered a hero by the government because the mill pays tens of millions of dollars in taxes each year.

Now you may understand why the government might ignore a factory's pollution unless that factory cannot afford to pay taxes. The municipal revenue, and city officials, would be badly affected by a factory closing.

There is an environmental protection bureau in every municipality, but the director is appointed by the mayor. The local newspapers and television stations are well aware of the environmental problems, but guess who nominates their chief editors? Again, the mayor. Of course, the chief editors dare not do anything to upset their superiors. In the meantime, China's environmental problems grow more and more severe.

The Chinese central government has called on local governments to protect the environment, and not to pursue economic development at the cost of the environment. But local officials say, "You ask me to achieve such a high economical index, and at the same time ask me to close factories, that's simply impossible!" Instead, local officials simply keep the truth from the central government.

In 1993, the NPC offered financial backing to journalists from dozens of national media to conduct collective interviews in various badly polluted regions. The interviews were to be conducted annually for a period of several months.

Chinese national media is different from American national media. The Chinese national media is supervised by the central government or by the departments of the central government. These media such as the People's Daily, Xinhua News Agency, and China Central TV, hold a privileged position and avoid local government restrictions. All of them are based in Beijing.

Chinese officials do not need to fear criticism from their direct superiors, who in fact are invested in protecting them. Instead, the officials and the superiors, conceal the truth from high-level superiors. They fear exposure by the media, especially

newspapers and television stations in Beijing. Therefore, the local officials usually extend an exceptionally warm welcome to journalists visiting their city.

First, the officials want to be portrayed as environmental conservationists and do not want to be criticized in the media. Secondly, they want to convey the impression that they have no knowledge of pollution problems, or that their subordinates have concealed such problems. Subsequently, senior local officials offer extremely courteous receptions to journalists. When journalists travel to interviews, their cars are usually accompanied by a grand motorcade, guided by a police car screaming in front. Under these circumstances, the journalists look like senior governmental officials.

Annual reports from the NPC-sponsored media group are very effective. They have helped solve some 4000 environmental pollution problems in the past nine years. The reports have also alerted the Chinese government to serious pollution, which led to the creation or modification of certain environment-related laws. For example, previously the owner of a factory could be held liable for environmental damage. But under a new law, the mayor is also responsible. This may force local officials to take environmental protection more seriously.

Chinese journalists are playing an increasingly important role regarding environmental concerns. In July 2001, a tin mine in northern China collapsed and more than 70 people were buried alive. At first, local officials tried to suppress news of the accident and the central government was kept in the dark. But Chinese journalists investigated and reported on the accident. Remarkably, the journalists who investigated the story were from the People's Daily on-line, a medium run directly by the Chinese Communist Party.

To date, environmental journalism successes in China have always been conducted by the central and national media, under the direction of the local governments. Unfortunately, we haven't yet seen local media in the provinces and the municipalities take on the role of environmental protection watchdogs or exposing actions by local officials that harm the environment. Will journalists play the role of analyzing and exposing environment-related actions by the Chinese central government? My answer is "not yet." But we have taken the first step.



New Regulations for the Prevention of Air Pollution in Shanghai

ERM China/EHS Review
August 2001

New Regulations for the Prevention of Air Pollution in Shanghai Shanghai's Standing Committee of the People's Congress approved Implementing Methods of PRC Law on Air Pollution Prevention in Shanghai on July 13, 2001.

The Methods will be effective from January 1st, 2002.

The 53-article regulation is aimed at preventing air pollution (including dust and odour) from industrial activities, coal burning, automobiles, and ships.

Major points include:

- Air quality in scenic areas, nature reserves and specially protected areas should meet the National Ambient Air Quality Class I Standard. Other areas, classified as Class II, are subject to respective Class II standards. A further detailed scope of function for areas in Shanghai will be defined by the city's environmental and planning authorities and submitted to the Shanghai Government for approval prior to issuing.
- No coal-burning areas will be approved, and new coal-burning power plants are banned except those that have already received approval. In addition, new boilers and kilns using highly polluting fuels are forbidden within Shanghai's inner ring road.
- Air pollution management in Shanghai is based on concentration and mass loading controls. Air

emissions should not exceed national and local standards.

- Local governments above county level will issue permits to enterprises whose key air pollutant emissions are under allocated mass loading targets. Temporary permits will be issued to those exceeding designated targets with a time limit allocated for correction.
- New, expanded, and renovated projects emitting key air pollutants should obtain mass loading targets. Environmental authorities must approve related air pollutant treatment facilities in order to obtain permits.
- The Shanghai environmental administration proposes the development of a key air pollutant catalogue which will be submitted to the Shanghai Government for approval. After which key air pollutants will become subject to mass loading controls. A permitting system will apply to key air pollutant emissions.
- It is prohibited to emit key air pollutants without permits or temporary permits. Violators will be fined up to 100,000 RMB.
- New, expanded or renovated boilers with evaporative power of over 20 tons or kilns with equivalent power must be equipped.

Beijing Steelmaker to Move Plants Before Olympics

Reuters News Service
28 September 2001

BEIJING - Chinese steel maker Shougang Corp will move its dirtiest plants out of heavily polluted Beijing, host of the 2008 Summer Olympics, by the end of this year, a company spokesman said yesterday.

Shougang, parent company of A share-listed Beijing Shougang Co, would also cut its annual production to six million tonnes from eight million tonnes by the end of next year in a bid to protect the environment, the spokesman said.

"It's mostly to protect the environment, but it's also part of a transformation we are going through," spokesman Wu Jianxin told Reuters by telephone.

Shougang - also known as Capital Iron and Steel - is one of the main causes of air pollution in Beijing, belching out thick clouds of choking brown smoke every day from its plant in a western suburb.

Air pollution, which often shrouds Beijing in a soupy smog, was a key concern during the city's successful bid for the 2008 Games.

The Beijing city government has promised to spend 45 billion yuan (\$5.4 billion) on cleaning up the environment and to move dirty factories away from the city centre.

MOVING OUT OF THE CITY

Shougang would move plants most harmful to the environment to the city of Qianan in adjacent Hebei Province, which is also an iron mine base, Wu said.

Shougang would also diversify its lines of production to make high tech products such as integrated circuits, he said.

As part of an anti-pollution drive in which it plans to spend 1.25 billion yuan (\$150 million) over four years, Shougang sought to cut emissions of smoke

and dust by 85.5 percent and of carbon dioxide by 89.3 percent by 2005, Wu said.

The central and Beijing governments had encouraged Shougang to clean up its operations, but the company made the commitments on its own, Wu said.

"These decisions are made by the company, and could not be set by the government," Wu said.

In addition to cutting steel production, Shougang will also continue to invest in new lines of integrated circuits and other high-tech products and try to rely less on its traditional steel business.

OVERCROWDED MARKET

Shougang, along with Wuhan Iron and Steel Corp and China's largest steelmaker, the Shanghai Baosteel Group, face an overcrowded domestic market and the likelihood of more competition after China joins the World Trade Organisation, expected by the end of this year.

"You can't always stick to the same products," Wu said. "There is a limit to how much the steel industry can grow."

More than half of Shougang's revenue of 36.7 billion yuan (\$4.43 billion) in 2000 came from non-steel products and investments.

Shougang began investing in integrated circuit production in 1991 with a joint venture with Japan's NEC Corp and would continue to invest periodically, Wu said.

Other businesses include real estate investment and robotics production.

Wuhan Iron and Baosteel have A share-listed arms Wuhan Steel Co and Baoshan Iron and Steel Co.

A shares are off limits to foreign investors.

China-Energy: China's Electricity Restructuring Blue Print Due Soon (IB)

Reuters News Service
30 October 2001

A restructuring blueprint for China's power sector should be finalized by the end of this year, *The South China Morning Post* said on 29 October. State Power Corp. President Gao Yan said the massive reform package, providing for the breakup of the country's power generating assets, would be ready before January 1st. Restructuring the sector is a key reform for Beijing, which wants to rationalize the industry and drive costs down through increased competition, the newspaper said. Premier Zhu Rongji was reportedly in favor of seeing the industry, famous for price gouging, subject to market discipline. Industry sources say the reform blueprint will call for power generation to be separated from transmission and distribution assets, with the formation of an electricity pool system based on market prices. Earlier in the year China revealed plans to split the operations of State Power in two. State Power Generation will own and operate power plants and State Power Distribution will run the transmission grid. State Power controls the country's high voltage grids and has a capacity of 150 gigawatts, representing about half of China's power-generation assets. According to reports, China's provincial power bureaus will be replaced by power generation companies that can compete across the country. Industry officials said the move could provide opportunities for large, independent, domestic powerproducers to acquire power assets. Gao said

Beijing would decide before January 1st whether it would lift a ban imposed last year on firms acquiring power generation plants. The ban has slowed the expansion of power companies such as a Beijing Datang Power Generation and Huaneng Power International. Beijing Datang is one of the largest independent power producers in China, owning and operating four power plants with a total installed capacity of 4,050 Mw. Huaneng Power was established in June 1994 to develop, construct, own and operate large coal-fired power plants. It has installed capacity of 8,700 Mw.

ANALYSIS (*frost.com*): China's electric power industry experienced a serious oversupply problem due in part to slower Chinese economic growth and to demand reductions from closures of inefficient state-owned industrial units, which were major consumers of electricity. The Chinese responded by closing small power plants and imposing a moratorium on new power plant construction, which is due to expire 1 January, but many new power plants are coming online, having been approved prior to the moratorium. The largest, by far, is the Three Gorges Dam. When completed in 2009, it will include 26 700 Mw generators, for a total of 18.2 Gw. At present, foreign direct investment is allowed only in power generation, but loan financing has been obtained for some power transmission projects.

China to Cut Consumption Tax on Some Cars

Reuters News Service
27 August 2001

BEIJING - China will slash consumption tax by 30 percent on cars that meet certain environmental standards to help spur the auto sector, the China Daily reported last week.

The State Economic and Trade Commission would "launch stringent tests on car products to see whether manufacturers can enjoy the tax reduction", the newspaper said.

Car makers would have to meet standards equivalent to European environmental protection criteria before getting the tax incentives, the newspaper said. Currently, the central government levies three to eight percent consumption tax on cars in addition to a 10 percent purchase tax, it said.

Domestic car manufacturers could save some 200 million yuan (\$24.17 million) from the tax cut, the newspaper said. It did not say when it would be

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China's consumption tax for automobiles, which ranges from 3-8 percent depending on the size of engine, will be reduced by 30 percent if their emissions reach Euro II standards, according to a circular jointly released on August 21 by the State Economic and Trade Commission, the Ministry of Finance, the State Administration of Taxation and the State Environmental Protection Agency. This new

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China's emission standard for heavy-duty diesel vehicles which is equivalent to the Euro I standard became effective as of September 1, 2001. All newly assembled heavy-duty vehicles equipped with compression ignited engines and a payload of 3.5 tons and higher must comply with the emission standard specified in the national standard GB17691-2001. As of October 1 of this year, all newly produced light vehicles under 3.5 tons (including buses and trucks) must satisfy the GB18352.1-2001 emission standard. These two standards were released last April by the State Environmental Protection

implemented.

Shanghai Volkswagen, Shanghai General Motor and a Wuhan-based venture between Dongfeng Automotive Group and France's PSA Peugeot Citroen have "met most of the requirements", it said. Shanghai Volkswagen is a venture between Germany's Volkswagen AG and Shanghai Automotive Industrial Corp, which also partners with General Motors.

State media have said the government was formulating a set of policies, including tax incentives, to encourage private car purchases.

Individual buyers account for roughly 40 percent of car sales in China at the present and the government aimed to boost that ratio to 70 percent over next 10 years, state media have said.

preferential policy applies to vehicles listed in the *Circular of Automobile Manufacturers and Their Products* issued earlier this year by the SETC and the *2000 Catalogue of Automobile Manufacturers and Their Products* issued by the former Ministry of Machinery Industry. To consumers, this would mean a reduction in consumption tax by 0.9 to 2.4 percentage points for "cleaner" vehicles.

Agency and the General Administration of Quality Supervision, Inspection and Quarantine.

LAWS AND REGULATIONS

Effective as of September 4, 2001, new vehicles with diesel engines in Shanghai must meet new emission standards to register for license plates. Starting from October 1, 2001, passenger and cargo vehicles under 3.5 tons must meet new emission standards. These new standards are equivalent to the Euro I emission standard.