III.

Promoting Environmental Regulatory System Reform, Energy Savings, and Environmental Protection

China Sustainable Energy Program

Energy consumption in China is having a serious effect on its environment. Excessive growth of energy consumption and a coal-dominated energy structure have increased the pressure on China's air pollution control efforts. Air quality in 60 percent of China's cities is over the Grade II Standard. 30 percent of China's land suffers from acid rain pollution, and trends are only worsening. Compared with the 1990s, the average concentration of sulfur and nitrate particles in rain rose by 15 percent and 33 percent, respectively. Areas of surface land subsidence in coal mining regions in China have reached 400,000 ha. Each year, coalmines discharge 2.2 billion tons of well water. Ecological destruction in China is only on the rise.

China is one of the few countries in the world that has made resource conservation and environmental protection fundamental national policies. Over the past 30 years, the State has put considerable manpower, material, and financial resources into environmental protection, and pollution prevention and control. However, the environment in China has continued to deteriorate and the environmental protection goals set in the country's various Five-Year Plans have never been met. The 11th Five-Year Plan (2006-2010) sets strict requirements for energy conservation and environmental protection, making lowering energy intensity by 20 percent and reducing major pollutants by 10 percent, the constraint control indices for national development. However, the unsatisfactory implementation of key projects in the 10th Five-Year National Environmental Protection Plan indicate major challenges in the coming years. During the 10th Five-Year Plan Period, desulphurization targets in China's thermal power industry were n only 70 percent fulfilled, while only 65 percent of key watershed pollution control projects were completed.

The primary reason for deficiencies in implementation is inadequate environmental regulation and law enforcement. The fundamental way to improve the environment is to start with the reform of the whole environmental regulatory system and improve law enforcement capacity. The main problems in the environmental regulatory system are the following: (1) Local governments are driven by economic returns, resulting in large numbers of illegal and high-polluting projects; (2) Administration of environmental protection is dysfunctional. There is a lack of direct administrative leadership between the higher and lower levels of environmental government, and environmental functions are dispersed among various departments, significantly decreasing efficiency; (3) The power of environmental protection departments is limited, greatly affecting their ability to participate in comprehensive decision-making; (4) Lenient regulations are the main cause of inadequate environmental law enforcement. The law enforcement measures for environmental protection are vague and punitive measures are not enforced; (5) Regulatory means are mostly administrative and lack supplementary policies and economic measures. A number of economic policies, such as ecological compensation and pollutant discharge fees are in urgent need of improvement; (6) Capacity building for environmental regulation is weak. There is a considerable gap between law enforcement capacity, the environmental monitoring system, the environmental regulatory information system, publicity and education capacity, and what is actually needed; (7) There is limited public participation; and (8) Both the national and provincial peoples' congress have not taken on their stated responsibilities

Recommendations for promoting environmental regulatory system reforms:

China has conducted research on environmental regulatory system reform for many years, realizing that there is the need to address the above challenges. Reform recommendations can be categorized into "Vertical and Horizontal" and "High and Low". The "Vertical" is the reform of the vertical regulatory system for the environmental protection department; The "Horizontal" is the coordination between government departments in environmental protection work; The "High" is legal system building and the regularity responsibility of the people's congress, while the "Low" is focused on the role of public participation in laying the foundation for environmental protection.

I. Improve and strengthen State environmental protection departments' decision-making power and law enforcement ability.

For the vertical regulatory system, raise the political position of the environmental protection department and implement the "semi-vertical regulatory" or "vertical regulatory" system for environmental protection departments. For regulatory measures, focus on raising pollutant discharge fee rates, establish and improve ecological compensation mechanisms in mining areas, and promote the implementation of pollutant discharge trading and other economic policies. Regarding regulatory capacity, focus on improving law enforcement capacity building in Western China and at county and township levels, and greatly strengthen monitoring of provincial-level key pollution sources throughout China.

1. Set up a Ministry of Environmental Protection.

The State Environmental Protection Administration (SEPA) is currently the only environmental unit directly affiliated with the State Council. While it has ministry status, it lacks significant policy formulation powers and the ability to participate in high-level decision-making between ministries and commissions that are a constituent department of the State Council. The lack of systems unifying decision-making and supervision between resource development and environmental protection administrations has resulted in resource waste and environmental pollution. China needs a Ministry of Environmental Protection, as a constituent department of the State Council, in order to strengthen its participation in comprehensive decision-making, administrative capacity, and unify environmental supervision.

2. Grant legal status and administrative authority to regional supervision centers.

Regional segmentation and administrative disorder are problems that have long plagued environmental regulation in China. SEPA is currently working to establish five environmental protection supervision centers in East, South, Northwest, Southwest, and Northeast China, six nuclear and radiation safety monitoring stations in Shanghai, Guangdong, Sichuan, Northern, Northeast, and Northwest China, and 11 resident law enforcement supervision departments, which are directly administrated by the national environmental protection department. This will be an attempt to break local protectionism and implement vertical regulation. However, this type of regulatory system faces two main challenges regarding legal status and government functions.

Currently, the employees of regional supervision centers belong to public utility establishments rather than formal government departments, while employees of government departments are regarded as public servants. There is no guarantee that public utilities have the ability to supervise government departments. Regional supervision centers need to be gradually included in the government regulatory system to increase their legal powers, ability to coordinate environmental protection departments in their region, and power in stopping local protectionism. It is suggested that the National People's Congress and the State Council issue documents recognizing the legal power and government functions of regional supervision centers.

3. Improve the central environmental protection department' rights to personnel appointment and removal, and right to financial expenditure supervision over provincial environmental protection departments.

Central to the vertical regulation of China's environmental protection departments is the power of the central (national) environmental protection department to appoint and removal personnel, and to supervise the financial expenditures of provincial environmental protection departments. The existing central and provincial government environmental protection structure should remain the same, but there needs to be an increase in the authority and initiative of provincial environmental protection departments, in order to make them more responsible and accountable for provincial environmental protection work. The provincial environmental protection department should assume primary responsibility for major negligent accidents of environmental protection in its jurisdiction.

4. Implement vertical administration of environmental protection regulatory departments at the provincial level.

The provincial environmental departments need to directly administer county-level departments, including controlling personnel appointment and removal. The government must consider that varying regional economic and environmental challenges have lead to different capacities in environmental law enforcement. Therefore, the provincial environmental protection departments should have autonomy in formulating local environmental standards, personnel establishment, and environmental punishments, and in improving the operability of environmental law enforcement.

5. Consolidate county-level environmental protection departments and improve supervision capacity.

With China's rampant economic growth, many environmental disasters are directly related to the management of cities, townships, and counties. However, as the implementation of environmental standards in urban areas become more widespread, polluting enterprises have begun to shift to the countryside. This migration of industry has lead to the establishment of the urban-rural interface as the region with the most irreversible, and often fatal, pollution. County-level governments are the front line of supervision and policy execution. Over the years, accidents of environmental protection and resources utilization have occurred, in addition to environmental destruction and waste of resources. This is directly linked to the long-standing ignorance of county-level governments towards regulation. County-level supervision is lacking in eight aspects:

personnel, I knowledge, ability, funds, means, authority, responsibility and law and discipline. Local protectionism is prevalent among country-level government officials. This has hampered policy implementation, resulting in weaker environmental law enforcement at the lower levels. The central and provincial governments should increase input, establish village, township and county environmental monitoring networks, and improve their environmental administration abilities.

II. Synergize and coordinate the regulatory power of horizontal environmental protection agencies.

Improve mechanisms for environmental protection departments to take part in comprehensive decision-making, specify the legal responsibilities and obligations of government departments and improve environmental protection effectiveness and efficiency.

1. Horizontal environmental protection departments need to have clear powers and responsibilities.

Currently, government function involving environmental protection is dispersed amongst various departments. There are institutional obstacles including department functions being misplaced, conflicting, or overlapping, thereby wasting research and administrative resources. It is not possible for the environmental protection department to monopolize all environmental protection functions, which need to rely on close cooperation between departments. Therefore, there is also a need to establish effective mechanisms to promote synergy and to coordinate the functions of the various departments. Through enhancing decision-making, supervisory and administrative functions, there is a need to ensure unified and comprehensive environmental protection work. As for international cooperation in environmental protection and climate change, the environmental protection departments should also shoulder major responsibilities: the environmental protection departments of various sectors needs to in a consistent fashion, to coordinate environmental protection activities with administrative departments, and to assume accountability. If major environmental accidents occur in any given sector, the environmental protection department of that sector should also assume its corresponding responsibilities.

2. Coordinate action to fulfill the 20 percent energy intensity reduction goal and the 10 percent pollution reduction goal.

The two quantitative targets set in the National Eleventh Five-Year Plan are both restrictive and are mutually promoting. In the implementation process, coordination and consistency should be maintained to ensure efficient policy execution. For example, if environmental targets can be added to the National Development and Reform Commission's 1,000 Enterprise Energy Conservation Project, the total effect can be doubled if corresponding pollutant discharge agreements are signed. Furthermore, the addition of environmental targets can improve the reliability of data environmental discharge: absent a major change in technological conditions, pollutant discharge data can be measured by calculating energy consumption, relying on the fixed relationship between energy consumption and pollutant discharge. Doing so would allow for the verification of such data, and would greatly improve environmental administration capacity.

Strengthen the regulation of externalities in the energy realm. Increasing energy efficiency standards and environmental protection standards should be set up for energy-consuming products and energy-intensive industries and enterprises, along with more stringent market entry thresholds. The energy and environmental regulatory departments need to enhance coordination and make the 20% energy conservation goal and the 10% important pollutant discharge reduction goals mutually-promoting. For example, it is possible to adopt a power generation performance standard in the electricity generation sector. Allocating emission quotas and carrying out pollutant discharge trading according to the power output is an important way to raise the efficiency of use of pollutant discharge charges. Meanwhile, the power generation performance standard can serve as the basis for priority grid access and scheduling. In addition, environmental standards are generally compulsory and their enforcement is more intensive than energy savings regulations. When shutting down heavy-polluting and high energy-consuming small-sized enterprises and eliminating backward technologies, environmental protection evaluation and standards should be introduced, along with a legal basis for these laws and their enforcement. Although energy saving is cost-effective measure, it still requires inputs. If enterprises do not cover the external costs, their investment in energy savings will be greatly weakened.

III. Give priority to legislation and strengthen the system of environmental supervision, and enhance the accountability of people's congresses at all levels of government.

Regarding legally-binding measures, revise the Environmental Protection Law, significantly raise the environmental punishment standards, step up implementation plans and improve supplementary policies, such as total volume control. Delineate the authority of a system to enhance accountability of the supervisory departments of people's congresses at all levels, and promote and improve the system of civil litigation regarding environmental protection and resources utilization.

2. Revise the *Environmental Protection Law*.

There is a need to reexamine ad evaluate existing laws and regulations. The *Environmental Protection Law* and several other important environmental laws have been in the midst of implementation for many years, to good effect; however, inherent defects still exist. As environmental protection activities progress, there is a need to make revisions and corrections, and to further the authority, severity and operability of the environmental protection laws. Therefore, we suggest that the Environmental and Resources Committee of the National People's Congress begin to modify and revise the *Environmental Protection Law* as soon as possible and to establish its position as the basic law for environmental protection, which will in turn facilitate the revision and legislation of various follow-up laws and regulations.

3. Environmental standards need to be forward-looking and operable.

Changes in the generation of pollutants and changes in emissions need to be incorporated in the process of formulating of environmental standards, in order to improve environmental administrative ability and pollutant discharge reduction. For example, current environmental monitoring is mainly directed at air and water, and more attention is needed for the content of pollutants in soils, which affects public health through food consumption. In addition, the growth of such pollutants as PM5, PM2.5, NO_x, ozone,

CO₂, and various heavy metals have not been monitored as key pollutants. Thus, reduced *total* emissions of sulfur dioxide and COD may not necessarily represent a true improvement of environmental quality.

The impact of pollution on health has received widespread attention as an environmental issue. In addition, conducting in-depth scientific research on the impact of environmental pollution on health also forms the basis for formulating various policies and making legal judgments. Quantitative research on the topic also helps in analysis of the internalization of externalities in energy utilization, and lays the foundation for designing and introducing pollution prevention and control policies through economic means.

4. People's congresses at all levels should exercise their right of supervision regarding environmental pollution and resources utilization.

China has established congresses of people's delegates from the national level to the country level. The rights and supervision power which the Constitution has granted to people's congresses at all levels is the most characteristic aspect of China's political system. Unfortunately, many government officials at all levels still take economic growth as their primary concern, at the cost of the environment and public health. Under conditions in which the legal system and the mechanisms for public participation are still being established, the power of supervision exercised by people's congresses at all levels becomes particularly important. Currently, the power of supervision exercised by the National People's Congress and provincial people's congress is quite strong. However, supervision by city- and county-level people's congresses is very weak. People's congresses in some localities even waive their right of supervision. In addition, while exercising their power, people's congresses at all levels should implement an accountability system. Those officials of people's congresses who do ignore (or who cover up) acts of environmental law violations should be subject to administrative punishment.

5. Establishing and improving a system of public interest environmental law is a primary duty in efforts to improve the system of environmental law.

Public interest law is the central and the most powerful way in which the public engages in environmental protection and supervises environmental law enforcement in many countries. However, due to lack of laws, many environmental disputes cannot become legal proceedings, and administrative punishment is often inadequate. The interests of pollution victims cannot be guaranteed, and polluting enterprises thus feel a sense of security. In light of these problems, establishing a public interest system should be made the primary task in efforts to improve the environmental law system. Through a better system of public interest law, there will be greater participation from legal workers and the public to promote the improvement of laws, regulations and standards. In addition, courts and lawyers should strengthen their ability to tackle environmental cases.

IV. Establish public participation mechanisms and strengthen supervision for environmental law enforcement.

Improve public participation mechanisms, implement an information disclosure system, improve the environmental awareness of the public and push forward the development of non-governmental environmental protection organizations, thereby giving full participation

and mobilization for the public in matters of environmental protection and environmental supervision.

1. Fully realize the importance of public participation.

Establishing the concept of governance by environmental laws requires public recognition and participation; formulating and improving environmental legislation needs public participation; achieving environmental judicial fairness and ensuring the fairness and efficiency of environmental law enforcement requires public participation and supervision; and supervision and observance of environmental law is inseparable from public participation. The existing environmental legislation has not paid enough attention to public participation in environmental protection. Operability of the existing provisions is poor, the scope of the provisions is too narrow, the forms of participation prescribed are too monolithic, and the provisions for information support need to be improved. Legislation for public participation in environmental protection is in urgent need of improvement.

Public supervision and participation serve four main roles. One is that of the individual actor. Protecting the environment and saving resources should start with small, individual actions. The second is that of advocate for new consumption ideas and for a culture that prioritizes environmental protection and conservation. The third is that of supervisor, to supervise polluters and government policy implementers. The fourth is that of policy participant, to carry out new consumption trends in society.

2. Information disclosure is a precondition for public participation.

Open disclosure of environmental information is a precondition for the public to participate in environmental protection. Legislation for public participation in environmental protection should first make environmental information public, including information concerning the government and its relevant departments, environmental conditions, and various pieces of environmental information about enterprises. Legislation for public participation in environmental protection needs to specify what information must be made public, how it is to be publicized, how the public gets the information, who disseminates the information, how to cover the cost of government departments' information disclosure, and procedures for when false information is issued, or when legally-mandated disclosure does not occur.

3. Encourage the development of environmental NGOs and foster professional and orderly public participation.

The effectiveness of public participation in environmental decision-making and supervision depends in large part on its professionalism and orderliness. Through coordination by NGOs, it is possible to make the ordinary masses fully express their opinions in a more professional and more rational manner, and thus to greatly lower the social cost of public participation while raising its efficiency. NGOs can allow government and citizens to engage in dialogue in a systematic manner, and the NGO is one of the most important aspect of orderly participation for citizens.

Therefore, the government should provide a relaxed policy environment in which non-governmental environmental protection organizations can become established, and

develop. The environmental protection system can nurture a social atmosphere of orderly public participation, acting as the administrative department for environmental NGOs. Currently, several simple yet feasible measures for the government to support environmental NGOs include facilitating NGO-official interaction; allowing NGOs greater participation in administrative affair; and addressing the low standing of NGOs in society.