SCIENCE AND LAW

## **Revising China's Environmental Law**

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hina's Environmental Protection Law (EPL) is the main national environmental legislative framework. Yet the environmental legal system is incomplete, and implementation and enforcement of environmental laws have shown major shortcomings (1-3). A controversial attempt to revise the EPL could have far-reaching impacts on China's economic development and environmental protection, which may have global implications (4, 5). Increasing pressures to strengthen the rule of law in China raise the stakes (6). We discuss the need for a sound legal and scientific basis for revising the EPL.

The National People's Congress (NPC) (the highest legislative body in China) Standing Committee included major revision of the EPL in its 2011 legislative agenda [see supplementary materials (SM)]. Proponents for radical revisions [e.g., the Ministry of Environmental Protection (MEP)] opposed other agencies and ministries that favor incremental adjustments. The 2012 draft revision shows the power of the incrementalists: Only the most urgent, feasible, and commonly agreedupon improvements that require little change of other existing environmental laws have been included (7, 8). Release of the draft revised EPL has triggered a flood of questions, comments, and complaints (4, 5, 8) (SM).

Debates resounded during the 2012 National Congress of the Communist Party of China (CPC), when top leadership changed and "Ecological Civilization" (restructuring the economy to achieve man-nature, production-consumption harmony) was included in the Constitution of the CPC, with emphasis on scientific and democratic governance under the rule of law (9, 10). Inclusion in the Constitution strengthened the legal and authoritative position of ecological civilization in development planning.

Because EPL revision was not approved by the NPC in March 2013, a new round of drafting is in process. The Legislative Affairs Commission of NPC has listed an EPL revision in the 2013 legislation plan. We suggest addressing the following four major issues.

In compliance with the Constitution, environmental protection and ecological civilization as national basic policy must be reaffirmed. The EPL should provide a legal basis for key environmental principles: the precautionary and prevention principles, public environmental rights and participation, and environmental justice (11, 12). These are absent or insufficiently stressed in the current draft.

A strong legal basis must be provided for independent strategic environmental assessment and performance-based auditing. The current Environmental Impact Assessment (EIA) law only requires EIA of plans or projects not of policies (13). Although after-thefact environmental audits should be conducted on all major public projects and programs by independent auditing institutions, few have been conducted because of limited capacity and knowledge within the National Audit Office and lack of legal backup (14). Environmental audits should be indispensable parts of decision-making of major governmental investments. EPL revision provides an opportunity to remove obstacles for powerful policy and to plan EIAs and governmental environmental audits crucial for science-based environmental policies.

Law enforcement must be improved. Principles for defining, coordinating, and supervising transregional and inter- and intradepartmental environmental rights, responsibilities, and obligations of governmental and nongovernmental actors need to be specified in the revised EPL. Internal and external evaluation of environmental performance of governmental organizations and officials should become compulsory and transparent (12, 15). Adequate rules for punishment must be set up and enforced to penalize those who violate the law—administrators, regulators, and regulated parties alike (1), e.g., through double punishment (punish the violating company and its owner), a daily penalty for continuous environmental violations, and avoiding low penalties. To align with litigation laws, the revised EPL should adopt public interest litigation and grant any public entity or citizen the right to bring violating administrative departments and other entities to court (5, 7).

The revised EPL should shift from regulation to governance, promoting participation of nongovernmental stakeholders and balancing "hard" instruments (e.g., commandThe law must affirm basic principles, strengthen assessment, improve enforcement, and enhance governance.

and-control) and "soft" (e.g., environmental education and voluntary agreements) (6, 16, 17). More transparency and public participation in policy and regulatory processes at all stages, from drafting legislation to enforcement activities, can improve policy effectiveness and address potential inconsistencies. Revision of the EPL can improve the government's legitimacy for promoting ecological civilization by following expert advice, including public suggestions, and empowering environmental authorities for sustainability (18). It is a unique opportunity for China to be a role model, especially for other emerging economies.

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## **Supplementary Materials**

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