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Yuhong Zhao

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Yuhong Zhao\*

# Assessing the Environmental Impact of Projects: A Critique of the EIA Legal Regime in China

## ABSTRACT

*This article provides an overview of the environmental impact assessment (EIA) legal regime for construction projects in China. Based on a historical review of the emergence and development of EIA as a regulatory mechanism from the 1970s to the promulgation of the more sophisticated Environmental Impact Assessment Law (EIA Law) in 2002, the article critically analyzes statutory gaps and flaws, including the relatively small number of projects subject to strict environmental scrutiny, excessive power granted to the local authorities in approving EIAs, limited public participation and inadequate disclosure of information, and minimal violation penalties in contrast to high compliance costs. Weak implementation and enforcement further impact the effectiveness of the EIA mechanism. The quality of EIA conducted by some EIA institutions is worrying; EIA approval authorities are pressured by local protectionism and post-EIA monitoring seldom takes place to ensure compliance. To address the above problems, legal reform, systemic change, and institution-building are essential to make EIA for construction projects a more effective decision-making tool that prevents and mitigates potential environmental harm so as to achieve long-term sustainable development.*

## INTRODUCTION

Environmental impact assessment (EIA) refers to a systematic and integrative process that evaluates the potential impacts of a major project significantly affecting the environment.<sup>1</sup> It is seen as an instrument with the central and ultimate role of achieving sustainable development.<sup>2</sup> By

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1. CHRISTOPHER WOOD, ENVIRONMENTAL IMPACT ASSESSMENT: A COMPARATIVE REVIEW 1 (2d ed. 2003).

2. JOHN GLASSON ET AL., INTRODUCTION TO ENVIRONMENTAL IMPACT ASSESSMENT 8 (3d ed. 2005).

abandoning environmentally unacceptable projects, development will not cause excessive harm to the environment. Unfortunately, in China's blind pursuit of massive economic growth since the late 1970s, EIA as a management tool has largely been treated as a matter of formality and has failed to prevent and mitigate environmental degradation caused by development projects. To address the intense "development versus environment" dilemma after more than two decades of environmental regulation failed to prevent catastrophes, China promulgated the Law on Environmental Impact Assessment (EIA Law).<sup>3</sup> Many doubted that the EIA Law would have any substantial impact on the course of China's development,<sup>4</sup> but in 2005, China's top environmental authority<sup>5</sup> shocked the country with its crackdown on EIA violations by large construction projects. By targeting the Three Gorges Hydroelectric Project and other giant power facilities at a time when China was in desperate need of increasing energy generation capacity, the State Environmental Protection Administration (SEPA, and also referred to as the Authority) has sent a strong message to the entire nation that environmental laws and regulations are to be implemented and enforced.

On January 18, 2005, SEPA ordered the suspension of 30 megascale construction projects in 13 provinces and municipalities for their failure to conduct environmental assessments as required by the EIA Law.<sup>6</sup> Among the 30 projects worth a total investment of 117.9 billion yuan,<sup>7</sup> 26 were hydropower stations, thermal power plants, and other power generating facilities, including three hydroelectric power plants constructed by the China Three Gorges Project Corporation,<sup>8</sup> a politically powerful state-owned enterprise at the same administrative rank as

3. Law on Environmental Impact Assessment (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2003) (P.R.C.) [hereinafter EIA Law].

4. See, e.g., Sarah Hayes, *China's New EIA Law—Is It Just a Toothless Tiger?*, 8 ASIA PAC. J. ENVTL. L. 177 (2004); Yan Wang et al., *Environmental Impact Assessment of Projects in the People's Republic of China: New Law, Old Problems*, 23 ENVTL. IMPACT ASSESSMENT REV. 543 (2003).

5. The State Environmental Protection Administration (SEPA) was renamed the Ministry of Environmental Protection (MEP) in March 2008. This is seen as an elevation of the status of the environmental authority in the administrative hierarchy. For accuracy, where reference is made to the rules promulgated or measures taken before the authority changed its name in March 2008, "SEPA" is used. Similarly, "MEP" is used in discussing the initiatives undertaken by the authority after March 2008.

6. Press Release, State Env'tl. Prot. Admin., SEPA Vice Minister Pan Yue Reports on the Illegal Construction of 30 Projects and Orders Suspension of Projects Ignoring Environmental Impact Assessment Regime (Jan. 18, 2005); see CHINA ENVIRONMENT YEARBOOK 279 (2006).

7. Chinese currency "yuan" is converted to U.S. dollars at the rate of USD 1 = CNY 6.83 as of March 23, 2009.

8. See Press Release, State Env'tl. Prot. Admin., *supra* note 6.

SEPA. Other big names on the “blacklist” included three of China’s largest state-owned power companies: China Guodian Corporation (Guodian), Huadian Power International Corporation (Huadian), and Datang International Power Generation Corporation (Datang). Domestic media praised the move as a “storm of environmental protection” blowing away longstanding obstacles to the enforcement of environmental laws and demonstrating the Authority’s commitment to ensuring development projects comply with the environmental laws.<sup>9</sup> Pan Yue, Vice Minister of SEPA, made the following statement: “Many have treated the EIA Law as a rubber stamp. What I want to say is that it isn’t, and we are determined to change the conventional attitude of the people.”<sup>10</sup>

A nationwide anti-pollution campaign targeting petrochemical plants posing serious environmental threats due to their proximity to major waterways or densely populated areas began in 2006.<sup>11</sup> In May of that year, SEPA issued a moratorium on 10 categories of construction projects that are to be denied the opportunity to submit and have reviewed their EIA documents.<sup>12</sup> SEPA then implemented innovative en-

9. Liu Yi, *Behind the Order to Suspend Thirty Giant Projects*, PEOPLE’S DAILY, Jan. 27, 2005, at 16; Qie Jianrong, *Let Environmental Protection Laws Be Strengthened as Steel*, LEGAL DAILY, Jan. 31, 2005, at 1; Wang Jingzhong, “*Environmental Protection Storm*” Demonstrates China’s Commitment to Sustainable Development, XINHUANET, Feb. 3, 2005.

10. Li Shufei & Chen Tianlu, *The Senior Official That Blew the “Environmental Protection Storm”*, 6A GOV’T AND LAW, at 10 (2005); see also Shi Jiangtao, *Watchdog Flexes Muscles, Orders Work on “Illegal” Projects to Stop*, S. CHINA MORNING POST, Jan. 19, 2005, at 6; Shi Jiangtao, *Wen Supports Crackdown on 30 Unapproved Projects*, S. CHINA MORNING POST, Jan. 27, 2005, at 5.

11. Eleven waterside factories and 10 projects were blamed for causing serious pollution or posing serious hazards and another 127 petrochemical plants worth a total investment of 450 billion yuan were to be investigated. See Qie Jianrong, *Preventing Environmental Risk at the Source According to Law*, LEGAL DAILY, Feb. 9, 2006, at 9; see also Shi Jiangtao, *Pollution a “Blasting Fuse” for Unrest*, S. CHINA MORNING POST, Feb. 16, 2006, at 6. SEPA’s call for investigation into 127 projects along the banks of China’s waterways came in the wake of the 2005 Songhua River benzene spill. Mr. Xie Zhenhua, former Minister of SEPA, was forced to retire as a result of the environmental authority’s failure to disclose information and undertake emergency response measures in a timely manner. Among the 127 projects, SEPA investigated 20, with the rest being scrutinized by the local environmental authorities.

12. “EIA documents” include EIA reports, EIA statements, and EIA registration forms. For a more detailed discussion on EIA documents, see *supra* Part II.A. The 10 categories of construction projects include: (1) projects expressly prohibited by the State and not in compliance with State’s Industrial Policy; (2) construction projects not in compliance with State policy involving steel, electrolytic aluminium, cement, calcium carbide, ferroalloy, coke, plate glass, and thermal power generating units less than 135 megawatts; (3) projects affecting the ecosystem and polluting the environment and located in drinking water source protection zones, nature reserves, famous scenic areas, important ecological areas, and ecologically sensitive zones; (4) projects not in conformity with urban planning and environ-

forcement measures in 2007. In January 2007, for the first time since the enactment of the EIA Law, SEPA imposed a blanket suspension of the approval of EIA documents for all construction projects in the cities of Tangshan (located in the Hebei Province), Lüliang (located in the Shanxi Province), Liupanshui (located in the Guizhou Province), and Laiwu (located in the Shandong Province) due to the cities' devastating environmental quality and serious environmental violations. SEPA further suspended the approval of EIA documents for all projects constructed by the four utility giants: Guodian, Huadian, Datang, and China Huaneng Group (Huaneng) due to their heavy polluting activities or failure to install desulphurization facilities.<sup>13</sup> The "blanket suspension of the EIA approval" was further extended in July 2007 to another six cities, two counties, and five industrial parks along the Yangzi (Yangtze) River, Yellow River, Huaihe River, and Haihe River.<sup>14</sup> From March 2006 to April 2007, SEPA refused to review the EIA documents of 43 projects worth 115.9 billion yuan because the project proponents failed to facilitate public participation.<sup>15</sup>

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mental protection plans; (5) projects located in the core area and buffer zones of nature reserves; (6) projects occupying experimental zones of nature reserves and causing ecological destruction, or projects outside the nature reserves while damaging the environmental quality and ecological function of the nature reserve; (7) projects not in compliance with state and local emission or discharge standards and the total amount control objectives; (8) energy- and resource-intensive projects that cause heavy pollution, manufacture low-quality products, consume large volumes of water, and cannot comply with emission or discharge standards; (9) projects located in zones where environmental quality cannot accommodate the environmental function and no measures could be taken to cut down the pollution load; and (10) new projects, modified projects, or extension projects of enterprises that are ordered to suspend operation to take environmental measures within a specified period of time, or that have failed to take proper measures to cut pollution within the time limit for projects involved in the "two control zones" pollution prevention plan and the "three gorges and upper stream" pollution prevention plan. Qie Jianrong, *SEPA Issued Inventory of Ten Categories of Projects to Be Denied Review*, LEGAL DAILY, May 29, 2006, at 6 [hereinafter Qie, *Ten Categories of Projects to Be Denied Review*].

13. All the targeted cities have serious pollution problems caused by environmental violations. For example, in Tangshan City, there are 70 steel companies in the city, 80 percent of which did not conduct an EIA before construction. They now cause severe air and water pollution. Press Release, State Env'tl. Prot. Admin., SEPA Announces Projects in Serious Violation of Environmental Law Worth 112.3 Billion Yuan and for the First Time Uses "Regional Suspension of Approval" to Limit Heavy Polluting Industries (Jan. 10, 2007).

14. Press Release, State Env'tl. Prot. Admin., "Regional Suspension of Approval" Imposed on Heavily-Polluted Yangzi River, Yellow River, Huaihe, and Haihe; Coordinated Water Management Mechanisms and New Environmental Economic Policies Are Needed (July 3, 2007).

15. Press Release, State Env'tl. Prot. Admin., SEPA Has Rejected 43 Projects for Failure to Satisfy Public Participation Requirement; Pan Yue Proposes Using Public Opinion and Wisdom to Eliminate Potential Environmental Harm (Apr. 26, 2007).

SEPA's "storm-like" enforcement campaigns were certainly necessary to strengthen the authority of environmental laws and the image of environmental enforcement bodies in China. But, will SEPA's campaign-style enforcement measures be able to eliminate EIA violations all over China? Will the restriction of EIA approval in those designated regions and along the designated rivers also change the behavior patterns of industry in other parts of China? Storms are forceful, but do they last long enough to deter violations for an extended period? The outlook is not positive, as admitted by Pan Yue, who has played a critical role in initiating the EIA storms.<sup>16</sup> To ensure long-term and widespread success of the EIA mechanism, more efforts are needed to carry out law reform and institution building.

This article studies the EIA legal regime for construction projects in China by examining the legislative provisions and the implementation and enforcement of the EIA Law. Part I presents a historical review of the emergence and development of EIA as a regulatory mechanism, from early recognition of its role in pollution prevention in the late 1970s to the more recent EIA Law in 2002. Part II examines the gaps and flaws in the legislation that render EIA less effective in preventing and mitigating potential environmental harm. Part III investigates the causes of weak EIA implementation and enforcement that have hindered the realization of the goal of the regulatory tool. Part IV makes recommendations on transitioning from a "storm-like" campaign to system building with reference to the Hong Kong experience.<sup>17</sup> There is hope that the "storm of environmental protection" will lead to China's long-term commitment to sustainable development,<sup>18</sup> instead of merely representing the political enthusiasm of just one single environmental minister.

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16. Pan Yue, *Preface to SUN YOUHAI, TRANSCENDING THE ENVIRONMENTAL "STORM": STUDIES ON CHINESE ENVIRONMENTAL AND NATURAL RESOURCES PROTECTION LEGISLATION* 1-5 (2008).

17. Hong Kong is a Special Administrative Region (SAR) of the People's Republic of China established on July 1, 1997, according to the principle of "One Country, Two Systems" under the preamble to the 1990 Basic Law of the Hong Kong Special Administrative Region and articles 2 and 3 of the 1984 Sino-British Joint Declaration. Article 8 of the Basic Law provides that except for those that contravene the Basic Law, the common law, rules of equity, ordinances, subordinate legislation, and customary law shall be maintained. The sound and sophisticated legal system and rule of law of the Hong Kong SAR offer valuable lessons for China, including the legislation on environmental impact assessment.

18. The EIA Law recognizes sustainable development as one of its goals: "This Law is hereby enacted in the view of implementing continuing development strategy, preventing plans and construction projects from causing adverse impacts to the environment after implementation, and enhancing coordinated development of the economy, society and environment." EIA Law, *supra* note 3, art. 1.

## I. BACKGROUND: EIA IN CHINA

As a result of its participation at the Stockholm Conference<sup>19</sup> in 1972, China introduced the preventive principle emphasizing pollution prevention in the country's environmental laws and policies.<sup>20</sup> In 1978, the Central Committee of the Chinese Communist Party (the Party) first articulated the importance and use of EIA in project construction:

The selection of a factory site shall take environmental protection and rational planning into consideration. The design profile of an engineering project must include environmental protection documents describing the environmental status prior to the construction, major environmental protection measures to be adopted, the environmental quality projected after the construction, and the environmental management system established within the enterprises.<sup>21</sup>

Under the guidance of the Party policy, an EIA regime was formally incorporated in the Environmental Protection Law (for Trial Implementation) in 1979.<sup>22</sup> The regime called upon enterprises and institutions to take pollution prevention and mitigation of environmental damage into consideration in every phase of construction and operation. In planning new construction projects, redevelopment projects, or extension projects, developers were required to "submit EIA reports to the environmental protection authorities for examination and approval prior to the commencement of these projects."<sup>23</sup> In urban development and redevelopment projects, the law required "assessments of the projects' en-

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19. The United Nations Conference on the Human Environment was held in Stockholm, Sweden in June of 1972. The conference drew international attention to the global problem of environmental deterioration, and has facilitated and promoted the evolution of environmental law worldwide, in both developed and developing nations. See United Nations Environment Programme, Declaration of the United Nations Conference on the Human Environment (June 16, 1972), <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97&ArticleID=1503>.

20. The first National Conference on Environmental Protection was held in August 1973, after which the State Council promulgated Several Provisions on Protecting and Improving the Environment on August 29, 1973, emphasizing the principle of pollution prevention in environmental protection. See Xie Zhenhua, A Review and Prediction of Environmental Protection in China, <http://cssd.acca21.org.cn/news0705.html> (last visited Jan. 16, 2010).

21. Approval of the State Council's Summary Report on Environmental Protection Work (promulgated by the Cent. Comm. of the Chinese Communist Party, Dec. 31, 1978). See Xie, *supra* note 20; WANG JIN, THE PRINCIPLES OF CHINESE ENVIRONMENTAL LAW 139 (2000).

22. Environmental Protection Law (For Trial Implementation) (promulgated by the Standing Comm. Nat'l. People's Cong., Sept. 13, 1979, effective Sept. 13, 1979) (P.R.C.).

23. *Id.* art. 6.

vironmental impact on industrial and residential premises, forest land, and public utilities in light of meteorological, geographical, hydrological and ecological conditions.”<sup>24</sup> EIA was thus adopted as a tool to prevent pollution and other public hazards in order to build clean modern cities in a planned way.

Ten years after implementation, the Environmental Protection Law (for Trial Implementation) was substantially amended.<sup>25</sup> The 1989 Environmental Protection Law reinforced the EIA mechanism for construction projects:

The EIA report of a construction project shall assess the pollution caused by the project and its impact on the environment, provide control measures and submit to the relevant environmental protection authorities for approval after a preliminary examination by the project supervisory authority. The relevant planning authority must not examine or approve any construction project until the project proponent has obtained approval of its EIA report by the environmental protection authority.<sup>26</sup>

EIA soon became one of the most important pollution prevention mechanisms incorporated in all major environmental statutes enacted in the 1980s and 1990s.<sup>27</sup> Construction projects are required to conduct EIA under the Air Pollution Prevention and Control Law,<sup>28</sup> the Water Pollution Prevention and Control Law,<sup>29</sup> the Law on the Prevention and Control of Environmental Pollution by Solid Waste,<sup>30</sup> the Environmental

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24. *Id.* art. 7.

25. The Environmental Protection Law of the People’s Republic of China was passed by the 7th National People’s Congress Standing Committee at its 11th meeting on December 26, 1989.

26. Environmental Protection Law (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 26, 1989, effective Dec. 26, 1989), art. 13(2) (P.R.C.) [hereinafter *Envtl. Prot. Law*].

27. For scholarly discussions of China’s use of the EIA mechanism, see JIN RUILIN ET AL., *CHINESE ENVIRONMENTAL LAW* 98–105 (1998); *TEXTBOOK ON ENVIRONMENTAL PROTECTION LAW* 88–93 (Han Depei et al. eds., 5th ed. 2007); WANG, *supra* note 21, at 138–45; ZHOU KE, *ECOLOGICAL ENVIRONMENTAL LAW* 73–75 (2001).

28. Law on the Prevention and Control of Air Pollution (promulgated by the Standing Comm. Nat’l People’s Cong., Sept. 5, 1987, amended Aug. 29, 1995, and Apr. 29, 2000, effective Sept. 1, 2000), art. 11 (P.R.C.).

29. Law on the Prevention and Control of Water Pollution (promulgated by the Standing Comm. Nat’l People’s Cong., May 11, 1984, amended May 15, 1996, and Feb. 28, 2008, effective June 1, 2008), art. 17 (P.R.C.).

30. Law on the Prevention and Control of Environmental Pollution by Solid Waste (promulgated by the Standing Comm. Nat’l People’s Cong., Oct. 30, 1995, amended Dec. 29, 2004, effective Apr. 1, 2005), art. 14 (P.R.C.).

Noise Pollution Prevention and Control Law,<sup>31</sup> and the Marine Environmental Protection Law.<sup>32</sup>

To translate EIA from an abstract concept into a concrete tool of environmental management, the State Council of the People's Republic of China (the State Council) and its Departments and Ministries promulgated administrative regulations and rules to specify procedural requirements and technical standards on the use of EIA in construction projects. The most important instruments among all are the Provisions on the Management of Environmental Protection of Construction Projects<sup>33</sup> and the Regulation on the Management of Environmental Protection of Construction Projects.<sup>34</sup> To further institutionalize EIA as a regulatory and decision-making tool, China promulgated the EIA Law in 2002,<sup>35</sup> incorporating the comprehensive legal regime for development projects (project EIA<sup>36</sup>) established by the earlier administrative regulations<sup>37</sup> and expanding the environmental assessment to certain types of government planning activities.<sup>38</sup> According to official statistics, a total of 1.17 million EIA documents for construction projects have been examined and approved by the environmental authorities nationwide since the implementation of the EIA Law in 2003 through the end of 2007.<sup>39</sup>

31. Law on the Prevention and Control of Environmental Noise Pollution (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 29, 1996, effective Mar. 1, 1997), art. 13 (P.R.C.).

32. Marine Environmental Protection Law (promulgated by the Standing Comm. Nat'l People's Cong., Aug. 23, 1982, amended Dec. 25, 1999), arts. 43, 47 (P.R.C.).

33. Provisions on the Management of Environmental Protection of Construction Projects (promulgated by the State Council's Env'tl. Prot. Comm., the State Planning Comm'n and the State Econ. Comm'n, Mar. 26, 1986, repealed by SEPA on July 8, 1999) (P.R.C.) [hereinafter Provisions on the Mgmt. of Env'tl. Prot. of Constr. Projects].

34. Regulation on the Management of Environmental Protection of Construction Projects (promulgated by the State Council, Nov. 29, 1998) (P.R.C.) [hereinafter EIA Regulation]. For a detailed discussion on the historical development of the EIA regime from the 1970s to the late 1990s, see Wang et al., *supra* note 4.

35. For a detailed account of the drafting and legislative history of the EIA Law, see WANG JIN, Comparative Study on EIA Among China and Foreign Countries and Regions: Due Process of Law in the Field of Environmental and Developmental Decision-Making (2006).

36. Project EIA refers to the environmental impact assessment of development projects that may have significant potential adverse impact on the environment during construction and operation, while strategic environmental assessment (SEA) refers to the assessment of the environmental impacts of government policies, plans, and programs.

37. EIA Law, *supra* note 3, ch. III. Chapter III of the EIA Law incorporated the major control mechanisms over project EIA in the EIA Regulation of 1998.

38. EIA Law, *supra* note 3, ch. II.

39. Report of the Inspection Taskforce of the National People's Congress Standing Committee on the Implementation of the Environmental Impact Assessment Law (submitted to the 5th Meeting of the 11th Nat'l People's Congress Standing Comm., Oct. 27, 2008)

Although the EIA Law has extended environmental assessment to certain government planning activities (generally referred to as strategic environmental assessment or SEA), it is still an undeveloped area of law, and it will take time to put the SEA into action. In contrast, the legal regime for project EIA has been in place since 1979, making it possible to engage in a scholarly inquiry and critique of both the legislative provisions and the implementation and enforcement of the law. The scope of this study is thus limited to project EIA and excludes the environmental assessment of government plans. The next part critically assesses the provisions of the EIA Law with special reference to project EIA.

## II. GAPS AND FLAWS IN THE EIA LAW

The EIA Law aims to promote a sustainable development strategy and to prevent potential adverse environmental impacts of plans and projects. The ultimate goal is to achieve coordinated development of the economy, the society, and the environment.<sup>40</sup> In particular, EIA is defined as a mechanism “to conduct the analysis, forecast and assessment of possible environmental impacts caused by plans and construction projects, and to take measures to prevent or mitigate the adverse environmental impacts as well as carrying out follow-up monitoring.”<sup>41</sup> Despite the elaborate provisions of the EIA Law, five years of implementation has exposed serious statutory flaws including insufficient coverage of the projects under strict environmental scrutiny, excessive power of the local authorities in EIA approval, limited public participation, and lack of deterrence caused by minimal violation penalties in contrast to high compliance cost.

### A. Insufficient Coverage of Projects Under Environmental Scrutiny

Due to limited financial and administrative resources, it is impossible and unrealistic to assess all impacts of all projects under any EIA regime. Depending on their nature, size, and location, construction projects generate varying degrees of adverse environmental impacts during construction and operation. An EIA regime is therefore usually concerned only with those adverse environmental impacts that are likely to be significant. International practice has established two broad approaches to the establishment of “significance”: (1) the compilation of lists of actions and of thresholds and criteria to determine which should

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[hereinafter Rep. of the Inspection Taskforce], available at [http://www.npc.gov.cn/npc/zfjc/hpjc/2008-10/27/content\\_1455671.htm](http://www.npc.gov.cn/npc/zfjc/hpjc/2008-10/27/content_1455671.htm).

40. EIA Law, *supra* note 3, art. 1.

41. *Id.* art. 2.

be assessed, and (2) the establishment of a procedure to determine which actions should be assessed.<sup>42</sup>

China has adopted the former approach. All construction projects are divided into three categories, each subject to a particular type of EIA with different documentary and participation requirements:

- (1) Where serious environmental impacts may be caused, an environmental impact report (EIA report) is prepared upon conducting a comprehensive assessment;
- (2) Where slight environmental impacts may be caused, an environmental impact statement (EIA statement) is prepared based on an analysis or assessment of the environmental impacts generated by the specific project; and
- (3) Where environmental impact is so small that an environmental impact assessment is not required, an environmental impact registration form (EIA registration form) is to be completed.<sup>43</sup>

Thus, based on their potential environmental impacts, projects are required to go through different types of EIAs and prepare different EIA documents accordingly: an EIA report, an EIA statement, or an EIA registration form.

The EIA Law specifies the essential components of an EIA report, requiring project proponents to describe the project, identify and assess the major environmental effects, and propose mitigation measures.<sup>44</sup> In contrast, there is no stipulation on the format or content of an EIA statement and EIA registration form.<sup>45</sup> Among the three types of EIA documents, both EIA reports and EIA statements shall be prepared only by qualified EIA institutions with professional expertise and technical abilities certified by the Ministry of Environmental Protection (MEP), while EIA registration forms are completed by the project proponents themselves.<sup>46</sup>

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42. WOOD, *supra* note 1, at 140. In practice, many EIA systems adopt a hybrid approach.

43. EIA Law, *supra* note 3, art. 16; EIA Regulation, *supra* note 34, art. 7.

44. Under art. 17(1) of the EIA Law, an EIA report must include: (i) the description of the construction project; (ii) the present situation of the surrounding environment of the construction project; (iii) analysis, forecast, and assessment of the possible impacts on the environment by the construction project; (iv) environmental protection measures of the construction project and relevant technical and economic analysis; (v) cost-benefit analysis of the environmental impacts of the construction project; (vi) recommendations on implementing an environmental monitoring system for the construction project; and (vii) conclusion of the environmental impact assessment. EIA Law, *supra* note 3, art. 17(1).

45. *Id.* art. 17(3).

46. *Id.* art. 20.

In order to clarify which type of EIA document is required for a given project, MEP has promulgated the Inventory on Classified Management of Environmental Protection of Construction Projects (Inventory).<sup>47</sup> Determining which category a project fits into calls for a comparison of a project’s characteristics with quantitative or capacity limitations identified in the Inventory. Where projects do not meet the threshold of “serious environmental impact,” they will be subject to the less demanding EIA requirement imposed upon projects with “slight environmental impacts.”<sup>48</sup>

Under the current categorization and definition by the EIA Law and the relevant administrative regulations and rules, only 3 to 5 percent of all construction projects are subject to rigorous environmental scrutiny, including an obligation to consult and involve the public in conducting the EIA process and preparing the EIA reports.<sup>49</sup> There is little or no public scrutiny in the preparation of the other two types of EIA documents. The EIA statements make up close to one-third of the EIA documents submitted for approval, and the EIA registration forms completed by the project proponents themselves without any professional or scientific assessment constitute around two-thirds of the total EIA documents submitted.

**TABLE: TYPES OF EIA DOCUMENTS PREPARED BY CONSTRUCTION PROJECTS<sup>50</sup>**

	Total Number of Projects Conducting EIA	Projects Preparing EIA Report	Projects Preparing EIA Statement	Projects Preparing EIA Registration Form
2004	320,997	3.2%	29.9%	66.9%
2005	314,038	3.6%	32.7%	63.7%
2006	363,524	3.6%	33.2%	63.2%
2007	278,000	5.5%	42.7%	51.8%

47. Inventory on Classified Management of Environmental Protection of Construction Projects (*amended* by the Ministry of Env'tl. Prot., Aug. 15, 2008, effective Oct. 1, 2008.) (P.R.C.).

48. *Id.*

49. Xie Zhenhua, Minister of the State Env'tl. Prot. Admin., Address at the National Work Conference on Environmental Protection Management of Construction Projects (Aug. 9, 2002). Xie revealed that 3 percent of the construction projects prepared environmental impact reports, close to 30 percent prepared environmental impact statements, and close to 70 percent only filled out environmental impact registration forms. *Id.*

50. This table was produced based on data provided by SEPA. CHINA ENVIRONMENT YEARBOOK 261 (2005); CHINA ENVIRONMENT YEARBOOK 277 (2006); CHINA ENVIRONMENT YEARBOOK 707 (2007); ANNUAL STATISTIC REPORT ON ENVIRONMENT IN CHINA 44 (2008).

Although there is no empirical study in China yet to prove it, the use of clearly defined thresholds may have created an incentive for project proponents to draft construction proposals that fall just below the threshold of “serious environmental impacts” to avoid the most rigorous environmental scrutiny that not only incurs financial burden and time delay but also poses the risk of public opposition. This practice often results in even more environmental harm due to a lack of proper oversight and monitoring.

## B. Excessive Power of the Local Authorities in EIA Approval

EIA documents are submitted for examination and approval by environmental protection authorities<sup>51</sup> that are required to review and convey review decisions to the project proponents in writing within the relevant time limits of 60, 30, and 15 days respectively for EIA reports, EIA statements, and EIA registration forms.<sup>52</sup>

The authority to approve the EIA documents is divided between the central MEP and local Environmental Protection Bureaus (EPB).<sup>53</sup> The MEP has the exclusive authority to review the EIA documents of “(i) special projects such as nuclear facilities and projects involving top state secrets; (ii) projects extending beyond provincial boundaries; and (iii) projects examined and approved by the State Council or by relevant departments with delegation of power from the State Council.”<sup>54</sup> Local

51. EIA Law, *supra* note 3, art. 22(1). If a given project directly involves a specific governmental department, the EIA documents are to be submitted to that department for pre-examination before submitting them to the relevant environmental bureau. *Id.*

52. *Id.* art. 22(3).

53. MEP is China’s top environmental protection authority of the central government. Its major function is environmental policymaking at the national level and supervision over the work of local EPBs that work at the provincial, municipal, county, township, and village levels to enforce environmental laws and regulations. For a detailed account of Chinese environmental protection institutions, see Abigail R. Jahiel, *The Organization of Environmental Protection in China*, in *MANAGING THE CHINESE ENVIRONMENT* 33, 33–63 (Richard Louis Edmonds ed., 2000).

54. EIA Law, *supra* note 3, art. 23(1). Article 23(1) was further interpreted by the Legislative Affairs Commission of the National People’s Congress Standing Committee. See Reply by the Legislative Affairs Commission of the National People’s Congress Standing Committee (Mar. 21, 2007), available at [http://www.npc.gov.cn/npc/xinwen/lfgz/xwdf/2007-05/16/content\\_365410.htm](http://www.npc.gov.cn/npc/xinwen/lfgz/xwdf/2007-05/16/content_365410.htm). The reply clarified that (1) “special projects” are not limited to nuclear projects and projects involving top state secrets, but are subject to interpretation by SEPA whether certain projects with special environmental sensitivity such as cyanide production projects are included in the category of “special projects”; and (2) “projects examined and approved by the State Council” include those “endorsed” (hezhun) by the State Council while those “filed for record” (bei’an) can be subject to the same EIA approval of this article if the projects have significant potential environmental impact and belong to the category of “special project.” *Id.* This second part of the interpretation is nec-

EPBs may approve the EIA documents of all other projects.<sup>55</sup> When disputes arise between local EPBs over a construction project having potential environmental impacts in more than one administrative region, the EPB at the next higher administrative level will have the authority to examine and approve the relevant EIA document.<sup>56</sup> The approval authority among the different local EPBs at provincial, municipal, and county levels used to be determined mainly according to the status of the investor and the investment amount.<sup>57</sup> This approach has led to the practice by project proponents to divide one whole project into several smaller ones so as to avoid the more stringent scrutiny by a higher level EPB.<sup>58</sup> The MEP has attempted to fix this problem by promulgating a list of projects whose EIA documents are to be exclusively approved by the MEP itself,<sup>59</sup> and a list of projects whose EIA documents are to be approved by a provincial EPB through a delegation of power by the MEP.<sup>60</sup> The provincial EPBs may not further delegate the power of EIA approval of the listed projects to lower level EPBs.<sup>61</sup> The approval authority of the EIA documents of other projects are distributed among the provincial, municipal, and county EPBs, not by reference to investment amount, but to the nature and degree of potential environmental impact.<sup>62</sup>

In practice, local authorities have the primary power to examine and approve the EIA documents of projects in terms of both project number and investment amount. County-level EPBs approve the EIA documents of over two-thirds of the total number of construction projects, accounting for over half of the total investment of all projects required to submit EIA documents.<sup>63</sup> Such distribution of power between

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essary as the State Council implemented the Decision on the Reform of Investment Regime in 2004 that has replaced “examination and approval” with “endorsement” or “file for record” for projects not involving investment by the government. *Id.*

55. EIA Law, *supra* note 3, art. 23(2).

56. *Id.* art. 23(3).

57. Provisions on the Approval of EIA Documents for Construction Projects (promulgated by SEPA Nov. 1, 2002, effective Jan. 1, 2003), art. 5 (the provisions were amended in 2009 with substantial change to the EIA approval authority).

58. This problem was identified by the Inspection Taskforce of the National People’s Congress Standing Committee when carrying out investigation on the implementation of the EIA Law in June and July 2008. *See* Rep. of the Inspection Taskforce, *supra* note 39.

59. Catalogue of the Construction Projects Whose EIA Documents are Directly Approved by MEP (promulgated by MEP, Feb. 20, 2009).

60. Catalogue of the Construction Projects Whose EIA Documents are Approved by Provincial EPBs with Delegation of Power by MEP (promulgated by MEP, Feb. 20, 2009).

61. Provisions on the Approval of EIA Documents for Construction Projects (promulgated by MEP, Jan. 16, 2009, effective Mar. 1, 2009), art. 6.

62. *Id.* at arts. 4, 8.

63. *See* CHINA ENVIRONMENT YEARBOOK 277 (2006); CHINA ENVIRONMENT YEARBOOK 261 (2005).

the central and local authorities in examining and approving EIA documents has resulted in seriously inadequate environmental scrutiny caused by prevalent local protectionism.<sup>64</sup>

### C. Limited Public Participation

Public consultation and participation are integral to an EIA, producing significant benefits for both project proponents and those affected. An EIA cannot achieve its goal of evaluating the environmental impact of a project fully without first obtaining the views of people most likely to be affected by the proposed project.<sup>65</sup> Consultation and participation “can help to ensure the quality, comprehensiveness and effectiveness of the EIA, as well as ensuring that the various groups’ views are adequately taken into consideration in the decision-making process.”<sup>66</sup> In China, public participation in project EIA is possible under the EIA Law, but the scope of participation is very limited. As a general principle, “the state encourages relevant units, experts and the public to participate in the EIA process in a proper way.”<sup>67</sup> However, the EIA Law only stipulates for public participation in EIA processes that produce EIA reports, which account for roughly 3 to 5 percent of all construction projects subject to the EIA requirement.<sup>68</sup>

Construction projects preparing EIA reports are required “to consult relevant institutions, experts and the public through various channels such as discussion forums or public hearings before submitting the report.”<sup>69</sup> The decision on adopting or rejecting any public comments needs to be explained and attached to the EIA report submitted for approval.<sup>70</sup>

Although construction projects preparing EIA statements or EIA registration forms have no obligation to inform and consult the public under the EIA Law, they may be required by local regulations to consult

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64. This is further explored in the next part on problems of implementation and enforcement.

65. WILLIAM SHEATE, ENVIRONMENTAL IMPACT ASSESSMENT: LAW AND POLICY—MAKING AN IMPACT II 83 (1996).

66. GLASSON ET AL., *supra* note 2, at 157.

67. EIA Law, *supra* note 3, art. 5.

68. See *supra* Part II.A, Table: Types of EIA Documents Prepared by Construction Projects. For more discussion on public participation in the EIA process, see generally Jesse L. Moorman & Zhang Ge, *Promoting and Strengthening Public Participation in China’s Environmental Impact Assessment Process: Comparing China’s EIA Law and U.S. NEPA*, 8 VT. J. ENVTL. L. 281 (2007).

69. EIA Law, *supra* note 3, art. 21(1). Exceptions are made for projects involving state secrets.

70. *Id.* art. 21(2).

affected institutions and residents. If such projects are located in residential areas and generate nuisances such as odors, fumes, and noise that directly interfere with the life of the people, local EPBs may request the project proponents to carry out public consultation.<sup>71</sup> In addition, EPBs may themselves conduct public consultation to solicit comments from both institutions and residents potentially affected by construction projects when examining the EIA documents.<sup>72</sup>

To enhance public participation in the EIA process, SEPA promulgated the Provisional Measures on Public Participation in Environmental Impact Assessment (Provisional Measures),<sup>73</sup> aiming to promote process transparency and ensure public access to information by imposing an obligation to disclose information on project proponents, EIA institutions, and environmental protection authorities. Where a project is located in an environmentally sensitive region and is required to prepare an EIA report, the project proponent must disclose material information about the project within seven days of appointing an EIA institution.<sup>74</sup> Prior to submitting an EIA report for approval, a project proponent or its appointed EIA institution needs to disclose to the public more detailed information including a description of the project, a summary of the potential environmental impacts, key measures to prevent and mitigate such adverse impacts, the means and designated period of time for the public to access the summary of the EIA report and to request supplementary information from the EIA institution, major issues open for public comment, and the specific means and duration of public consultation.<sup>75</sup> A minimum of 10 days is required for public consultation, during which all information required to be disclosed must remain publicly accessible.<sup>76</sup> At the stage of approval, the environmental authority is required to disclose its acceptance of a project's EIA report,<sup>77</sup> and further publicly announce its decision on whether to approve the report.<sup>78</sup>

71. See Reply on the Issue of Implementation of Public Consultation in the Environmental Impact Assessment of Construction Projects (promulgated by SEPA, June 20, 2002), available at [http://www.zhb.gov.cn/info/gw/huanhan/200206/t20020620\\_83014.htm](http://www.zhb.gov.cn/info/gw/huanhan/200206/t20020620_83014.htm).

72. *Id.*

73. Provisional Measures on Public Participation in Environmental Impact Assessment (promulgated by SEPA, Feb. 14, 2006, effective Mar. 18, 2006).

74. The construction unit must disclose the following information: (i) the name and brief summary of the project; (ii) the construction unit's name and contact information; (iii) the EIA institution's name and contact information; (iv) the procedure and major contents of the EIA process; (v) the major items for public comment; and (vi) the major channels by which the public may comment on the project. *Id.* art. 8.

75. *Id.* art. 9.

76. *Id.* art. 12(2).

77. *Id.* art. 13(1).

78. *Id.* art. 13(4).

While noticeable progress has been made to facilitate public participation in the EIA process, the public still finds it extremely difficult to provide meaningful input that could have real impact on the ultimate decision made by the government. One significant obstacle is the lack of adequate and accurate project information.<sup>79</sup> While project proponents and EIA institutions are required to make a “summary of the EIA report”<sup>80</sup> available for public comment and the environmental authorities are required to announce the acceptance of the EIA reports and the decision on whether to approve the EIA reports, at neither stage of the EIA process can the public access complete EIA reports. SEPA expressly rejected the public right of access to full EIA documents through the environmental authorities in its Reply to the Shanghai EPB.<sup>81</sup> It excluded the EIA documents from “government information” required to be disclosed by the government authorities under both the Measures on Disclosure of Environmental Information (for Trial Use)<sup>82</sup> and the Regulation on Disclosure of Government Information.<sup>83</sup> Without access to accurate and reliable project information, the public is placed at a great disadvantage. An opportunity to comment does not necessarily lead to meaningful public input. In fact, the effectiveness of EIA relies on an exchange of information between government, industry, environmentalists, and the public.<sup>84</sup> This has not been achieved under the EIA Law so far.

#### D. High Compliance Cost Versus Minimal Penalties for Violations

The 2005 “storm of environmental protection” has revealed the common practice of many project proponents (including large scale, state-owned enterprises) to start construction first and then, if caught by the enforcement authority, submit an EIA document and continue with construction. It is even common for a project with significant environ-

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79. Zhang Jiawen, *On Information Disclosure in China's EIA Regime*, LEGAL SYS. & SOC'Y, Aug. 2008, at 208–09.

80. The summary of the EIA report should be clear, concise, objective, and well written, accurately reflecting the text of the EIA report. Any tendency to distort the document by failing to reflect the assessment results accurately should be resisted. See WOOD, *supra* note 1, at 182.

81. SEPA's Reply to Shanghai EPB on Public Request to Disclose EIA Documents (Jan. 30, 2008), available at [http://www.zhb.gov.cn/info/gw/huanhan/200802/t20080202\\_117941.htm](http://www.zhb.gov.cn/info/gw/huanhan/200802/t20080202_117941.htm).

82. Measures on Disclosure of Environmental Information (For Trial Use) (promulgated by SEPA, Apr. 11, 2007, effective May 1, 2008).

83. Regulation on Disclosure of Government Information (promulgated by the State Council, Apr. 5, 2007, effective May 1, 2008).

84. JANE HOLDER, ENVIRONMENTAL ASSESSMENT: THE REGULATION OF DECISION MAKING 6 (2004).

mental impact to complete construction and begin operation without even going through the EIA process at all.

The reason why so many projects, both large and small, choose to ignore the EIA Law and skip the EIA process is obvious: it is much more cost-effective to break the law than to comply with it. The EIA Law has failed in deterring violations and encouraging compliance.<sup>85</sup> Under Article 31(1) of the EIA Law, project developers starting construction without carrying out an EIA will be ordered by relevant environmental authorities to suspend construction and to go through the EIA process (by submitting a “make-up” EIA document) within a specified time limit. Failing to submit an EIA document within the stipulated time limit is subject to a maximum fine of 200,000 yuan.<sup>86</sup>

This level of deterrence has proven to be insufficient for a number of reasons. First, a project proponent has nothing to lose if it submits a make-up EIA document within the time limit. Ironically, it even has a better chance of having the EIA document approved in a more expeditious manner since the investment is in place and the construction is already underway. The EIA Law has failed to deter this “construction first, and EIA second” practice that wholly defeats the fundamental purpose of an EIA as a preventive tool that assesses, avoids, and mitigates potential environmental harm before it happens.

Second, the fine with a maximum cap of 200,000 yuan is nominal and negligible for mega state projects involving multi-billion yuan investment such as the Three Gorges Hydroelectric Projects.<sup>87</sup> The extensive use of caps on fines, which are always disproportionately lower in comparison to compliance costs, has directly caused the widespread practice of ignoring and violating environmental laws by polluters.<sup>88</sup>

Third, the EIA Law only provides for liabilities and remedial measures in scenarios where the projects in violation are caught in the process of construction. Suspension of construction and make-up EIAs do not make sense if the construction is complete and the project is already

85. The estimated cost of an environmental violation is less than 10 percent of the cost of taking measures to prevent and minimize pollution, and less than 2 percent of the cost of the environmental harm. See Wang Canfa, *Low Cost of Environmental Violation: Causes and Proposal for Change*, in ENVIRONMENTAL PROTECTION 32 (Sept. 2005).

86. EIA Law, *supra* note 3, art. 31(1). The maximum fine doubled the amount provided by the 1998 EIA Regulation. See EIA Regulation, *supra* note 34, art. 24.

87. Xie Ding, *SEPA Imposes Fine on the Three Gorges Firm*, LAW EVENING NEWS, Feb. 20, 2005, at A9, available at <http://fzwb.yynet.com/article.jsp?oid=4712663>. In the “storm of environmental protection” of 2005, the China Three Gorges Project Corporation was eventually fined 600,000 yuan by SEPA, with a maximum penalty of 200,000 yuan imposed on each of the company’s three projects: the Jinsha River’s Xiluodu dam, the Three Gorges underground power station, and the Three Gorges project power supply station. *Id.*

88. See Wang, *supra* note 85.

operating. Presumably, construction projects violating the EIA Law are likely to be detected if they commence construction without having the EIA documents approved. However, given the low level of openness and transparency of the decision-making process and limited access to information by the media and the public, there have been many cases where a project completes construction without ever going through the required EIA process.<sup>89</sup> The EIA Law is silent on liabilities or remedies in such circumstances. In addition to the statutory gaps and flaws discussed above, the effectiveness of the EIA mechanism is further affected by the weak implementation and enforcement in practice.

### III. WEAK IMPLEMENTATION AND ENFORCEMENT

The “storm of environmental protection” of 2005 has exposed the inconvenient truth of prevalent disregard and abuse of the EIA legal regime not only by the small- and medium-sized enterprises (SME) that tend to lack the financial resources and environmental legal awareness,<sup>90</sup> but also by key multibillion yuan state-development projects. To make matters worse, multinational corporations from all over the world have raced to China, setting up factories and plants to take advantage of the cheap land, labor, natural resources, and lax environmental law enforcement. Many of these factories and plants are heavy-polluting energy-intensive workshops that lack proper environmental protection measures and devices. Local governments have chosen to ignore the environmental consequences inflicted by these projects in the overzealous pursuit of gross domestic product (GDP) growth through foreign direct investment.<sup>91</sup> As a result, over two decades of unbridled economic development has brought not only new wealth but also blackened rivers,

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89. One example is the Beijing-Miyun Water Supply Channel Lining Project of 2000. The channel supplies water for residential, commercial, and industrial uses in the Beijing area from the Miyun Reservoir. In order to reduce water loss during transmission, the Beijing municipal government invested a total of 400 million yuan to install a 73-kilometer-long layer of cement onto the muddy riverbed. An EIA was not carried out and the adverse ecological impacts were discovered only after the project was completed. For more on this project, see Xiao Liu, *The Debate over Lining Beijing Rivers: Who's Right and Who's Wrong?*, SCI. & TECH. TREND, Dec. 2002, at 22; Zhang Ling, *Rivers Should Not be Wrapped in Cement*, CHINA YOUTH DAILY, Sept. 26, 2000, [http://zqb.cyol.com/content/2000-09/26/content\\_84461.htm](http://zqb.cyol.com/content/2000-09/26/content_84461.htm); Wu Chenguang, *Why Make Rivers Lose Life: A Closer Look at Beijing Water System Treatment Projects*, S. CHINA WEEKEND, Sept. 12, 2002, <http://www.nanfangdaily.com.cn/zm/20020912/xw/shxw/200209120742.asp>.

90. According to Pan Yue, Vice Minister of SEPA, only 30 to 40 percent of county and township enterprises have carried out EIAs as required by law. See Qie, *Ten Categories of Projects to Be Denied Review*, *supra* note 12.

91. Editorial, *From Workshop of the World to a Junkyard*, S. CHINA MORNING POST, Aug. 18, 2004, at 4.

filthy air, depleting natural resources, and loss of biodiversity. When promising that the high-profile enforcement action initiated by SEPA was only the beginning of the campaign against violations of the EIA Law, Xie Zhenhua, former Minister of SEPA, openly admitted that the implementation continued to lag behind what is required by the law.<sup>92</sup>

This part of the article discusses the questionable quality of the EIA process and the EIA documents, the power imbalance between central and local authorities leading to local protectionism, and the lack of post-EIA monitoring and compliance supervision.

### A. The Quality of EIA Process and EIA Documents

In order for an EIA to function as a regulatory tool to prevent environmental harm, the quality of EIA process and EIA documents must be ensured. Many EIA documents are prepared by professional consultants, known in China as EIA institutions. The EIA Law imposes quality control on EIA institutions that produce both EIA reports and EIA statements. EIA institutions obtain their qualification certificates from MEP based on review and examination and may only provide services according to the grade designated and scope of service mandated by the certificates.<sup>93</sup> MEP promulgates and updates the list of qualified EIA institutions,<sup>94</sup> but it may not assign a proposed construction project to any particular EIA institution.<sup>95</sup> Project proponents are free to choose any qualified EIA institution and may use public tender to select one for carrying out the assessment.<sup>96</sup>

Despite the legislative and administrative provisions on quality control, substandard EIA documents continued to be produced by EIA institutions. As the EIA service has become a more market-oriented and demand-driven business, many EIA institutions compete for survival by establishing and maintaining a stable clientele, i.e., project developers. They tend to accommodate for project proponents' demands instead of

92. Ray Cheung, "Toothless Tiger" to Pounce Again, S. CHINA MORNING POST, Mar. 16, 2005, at 7.

93. EIA Law, *supra* note 3, art. 19(1). According to the Provisions on the Management of Qualifications of EIA Institutions promulgated by SEPA in 2005, EIA institutions are graded A or B depending on their human and financial resources. Grade A institutions can conduct EIAs and prepare EIA reports or EIA statements to be approved by any level of the environmental protection authorities. Grade B institutions can conduct EIAs and prepare EIA reports or EIA statements to be approved by the environmental protection authorities at provincial or lower levels. *Id.*

94. *Id.* art. 19(2). SEPA updates this list from time to time; members of the public may access it at SEPA's official website, <http://www.zhb.gov.cn>.

95. *Id.* art. 20(2).

96. EIA Regulation, *supra* note 34, art. 14(1).

carrying out assessment in an objective and professional manner. Some EIA institutions even treat the process as a formality and do not provide conclusions or recommendations based on scientific evidence and technical analysis.<sup>97</sup> A few even fabricate data, produce misleading and inaccurate descriptions of projects, and conceal important evidence in the preparation of EIA documents.<sup>98</sup> Nationwide checkups by SEPA revealed that many EIA institutions had failed to provide quality and professional service in compliance with the relevant laws and regulations. The 2001 quality assurance campaign found 5.47 percent of the 750 EIA institutions to be substandard.<sup>99</sup> As a result, SEPA revoked the EIA qualifications of 18 institutions and imposed various sanctions on another 23.<sup>100</sup> The 2004 campaign found 7.34 percent of the 926 EIA institutions to be unqualified. Among the 68 unqualified EIA institutions, eight had their licenses revoked, four had their scope of business narrowed down, 11 were ordered to suspend operations and make improvements, and 16 were publicly reprimanded. The 29 remaining institutions had their applications pending at the time of the checkup and were therefore not granted qualification certificates.<sup>101</sup>

Measures were taken by SEPA in 2005 to strengthen the quality control mechanism. SEPA promulgated the Provisions on the Qualification Management of Construction Project EIA Institutions (Provisions),<sup>102</sup> which has substantially extended the legal liabilities of both EIA institutions and individual qualified EIA engineers. Under the Provisions, if an

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97. See Mei Hong, *Problems of China's EIA Law and Responses*, ASIA-PAC. ECON. REV., July/Aug. 2005, at 93.

98. *Id.*

99. Guo Nei, *Ineffective Environment Assessment Units Rapped*, CHINA DAILY, June 21, 2002, [http://www.chinadaily.com.cn/en/doc/2002-06/21/content\\_124716.htm](http://www.chinadaily.com.cn/en/doc/2002-06/21/content_124716.htm).

100. The qualification certificates of the China Institute of Geological Engineering Prospecting and 17 other units were revoked. The Beijing Academy of Coal Designing and 13 other units had demotion penalties imposed. The Chinese Academy of Forestry Sciences and the Chinese Academy of Meteorological Sciences were urged to undergo a three-month reform and consolidation to get up to standards, during which their credentials were to be suspended. The Chinese Academy of Environmental Sciences, as well as six other units, were criticized in an official dispatch. Also, the credentials of four other institutes, including the Academy of Occupational Health under the Ministry of Labor and Social Security, were cancelled due to the reorganization. *Id.*

101. Press Release, State Env'tl. Prot. Admin., SEPA Vice Minister Pan Yue Announces Disciplinary Actions Against 68 Unqualified EIA Institutions: Requests Thorough Cleanup of the EIA Market by Punishing EIA Institutions for Their Unlawful Acts (Dec. 27, 2004) (on file with author); see also Qin Chuan, *Unqualified Assessors Punished*, BUS. DAILY UPDATE, Dec. 29, 2004, at 29, available at [http://www.chinadaily.com.cn/english/doc/2004-12/28/content\\_404048.htm](http://www.chinadaily.com.cn/english/doc/2004-12/28/content_404048.htm).

102. Provisions on the Qualification Management of Construction Project EIA Institutions (promulgated by SEPA, Aug. 15, 2005, effective Jan. 1, 2006).

EIA institution is found to have produced inaccurate EIA documents as a result of irresponsibility or falsification, SEPA will downgrade or revoke the qualification certificate of the EIA institution, impose a fine of one to three times the cost of the EIA service fee, and revoke the registration of individual EIA engineers directly responsible for the preparation of the EIA documents.<sup>103</sup> Where EIA institutions are found to have produced low-quality EIA documents in the process of EIA approval or by random check and review, they will be given a warning and be criticized by public announcement. They may even have their operations suspended for three to 12 months or be downgraded from Grade A to Grade B depending on the seriousness of the circumstances.<sup>104</sup> The relevant sanctions are announced to the public<sup>105</sup> in order to enhance public confidence in the EIA process.

In addition, SEPA introduced the qualification exam for EIA engineers in order to strengthen the quality control over individual EIA professionals through a qualification system that not only helps them upgrade their technical knowledge and skills but also improve their standard of professional ethics. Qualified EIA engineers need to use the utmost care and good judgment on projects they assess as they will bear legal responsibilities if the projects prove to be environmentally unsound.<sup>106</sup> The effectiveness of these measures ultimately depends on the willingness and capability of the environmental authorities to enforce them.

One further problem that has seriously affected the quality of the EIA documents and the authority and fairness of EIA approval is the existence of potential conflicts of interest between EIA institutions and the EIA approval authorities. Some of the EIA institutions were found to be subordinate organs of the EPBs.<sup>107</sup> MEP admitted that by June 2008, 24.7 percent of Grade A EIA institutions and 48 percent of Grade B EIA

103. *Id.* art. 35.

104. *Id.* art. 38. A "low quality" EIA document suffers from one of the following: (i) relatively substantial errors in construction project engineering analysis; (ii) unclear description of current environmental status or obvious mistakes in environmental monitoring data; (iii) careless omission of factors in assessing environmental impacts; (iv) erroneous application of environmental standards; (v) incorrect methodology adopted for projecting and assessing environmental impacts; (vi) incomplete assessment not complying with the relevant technical standards or not providing sufficient support for the conclusion; (vii) insufficient, unreasonable, or impracticable proposals; and (viii) unclear conclusions. *Id.*

105. *Id.* art. 39.

106. Qin Chuan, *Assessing the Assessors Begins in May*, BUS. DAILY UPDATE, Jan. 16, 2005, at 17, available at [http://www.chinadaily.com.cn/english/doc/2005-01/16/content\\_409537.htm](http://www.chinadaily.com.cn/english/doc/2005-01/16/content_409537.htm).

107. See Rep. of the Inspection Taskforce, *supra* note 39.

institutions<sup>108</sup> nationwide were subordinate institutions of environmental protection authorities.<sup>109</sup> Even if these bodies have the professional expertise and financial and technical resources to conduct an EIA, the perception that they can guarantee approval of the EIA documents through personal contacts renders an EIA purely a matter of formality.

Last but not least, EIA documents may be inherently flawed due to the lack of compulsory assessment of cumulative impacts and consideration of alternatives in the EIA Law. Environmental impacts of a particular project cannot be viewed in isolation from the impacts that may result from other projects in the same ecosystem. An accurate EIA should assess the cumulative environmental effects of the proposed project together with all past, present, and reasonably foreseeable future activities.<sup>110</sup> Equally important is the consideration of alternatives, which is a key element of environmental assessment.<sup>111</sup> An economic analysis of a proposed project and all reasonable alternatives is extremely helpful to both the project proponent and the environmental approval authority seeking to make an informed choice from among all possible options.

## B. Power Imbalance and Local Protectionism

MEP is often perceived as powerless. The ministries of industrial and economic development and local governments frequently ignore its mandates and rules. It was obvious from the very beginning of the “storm of environmental protection” that SEPA (MEP’s predecessor) faced strong opposition from powerful figures and sectors within the central government. By January 24, 2005, only 22 of the 30 projects complied with SEPA’s order and suspended construction.<sup>112</sup> A Guizhou power plant belonging to Huadian resumed construction within two days of SEPA’s announcement.<sup>113</sup> It was not until Premier Wen Jiabao offered a gesture of full support<sup>114</sup> that construction on all 30 projects

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108. For the distinction between Grade A and Grade B EIA institutions, see *supra* note 93.

109. Qie Jianrong, *EIA Institutions Are to Be Separated from the Environmental Protection Authorities Completely*, LEGAL DAILY, Nov. 4, 2008, at 8.

110. HOLDER, *supra* note 84, at 130–36.

111. *Id.* at 148–52.

112. Press Release, State Env’tl. Prot. Admin., SEPA Vice Minister Pan Yue Updates on the 30 Illegal Construction Projects: Most Have Suspended Construction (Jan. 24, 2005); see also Editorial, *Construction of 22 Large Polluting Projects Stops in China*, XINHUA ECON. NEWS SERV., Jan. 25, 2005.

113. Shi Jiangtao, *Watchdog Clears the Way for Power Plant Construction to Restart*, S. CHINA MORNING POST, Feb. 17, 2005, at 4.

114. On January 25, 2005, Xie Zhenhua, former minister of SEPA, reported to the National Environmental Protection Work Conference that Premier Wen Jiabao had praised

came to a halt on February 2, 2005.<sup>115</sup> However by February 19, 2005, within one month of the suspension order, SEPA allowed 26 of the 30 projects to resume construction presumably due to political pressure.<sup>116</sup> The incredibly short period of time taken for the EIA to be carried out and the relevant EIA reports to be drafted, scrutinized, and approved raised concern over the quality of such abrupt assessment, as well as the validity of the approval process in general.

The most serious obstruction to effective implementation of the EIA Law comes from local governments, especially those at the county level. Some local governments not only fail to support the enforcement of the EIA Law, but also promulgate local rules and policies to interfere with or restrict environmental law enforcement.<sup>117</sup> In 2007 alone, a total of 51 pieces of local government instruments were identified to be in contravention of the EIA Law.<sup>118</sup> According to Pan Yue, vice-minister of MEP, only 30 to 40 percent of the county and township enterprises have carried out EIAs as required by law.<sup>119</sup> There are too many cases where EPBs have approved EIA documents for projects that contradict State Industrial Development Plans or allowed improper siting of the

SEPA for taking tough actions against large-scale projects that violated environmental protection laws. The State Council and Premier Wen Jiabao fully supported SEPA's action. *See* Wang et al., *supra* note 4. As a matter of fact, SEPA announced its decision to suspend the construction projects not only based on their violations of the EIA Law, but also with an aim to implement a recent State Council notice. Urgent Notice on Approval of the Suggestion of the State Commission on Development and Reform to Fully Prohibit the Disorderly Construction of Power Projects (promulgated by the State Council, Nov. 24, 2004).

115. Press Release, State Envtl. Prot. Admin., SEPA Vice Minister Pan Yue: Hydro-power Construction Projects Must Implement EIA; All Thirty Projects are Being Rectified (Feb. 2, 2005); *see also* Wang Jingzhong, *China's Environment Agency Wins Major Battle Against Powerful Polluters*, XINHUA GEN. NEWS SERV., Feb. 2, 2005; Qin Chuan, *All 30 Law-Breaking Projects Building Stopped*, CHINA DAILY, Feb. 3, 2005, [http://www.chinadaily.com.cn/english/doc/2005-02/03/content\\_414637.htm](http://www.chinadaily.com.cn/english/doc/2005-02/03/content_414637.htm). A series of dams proposed along the Nu, Jinsha, and other rivers in Yunnan province threaten the region's rich biological diversity and geographic features. For example, the Xiluodu hydropower project on the upper reaches of the Yangtze River, one of the projects on SEPA's blacklist, could affect the survival of more than 40 species of fish unique to the river. Despite pressure from UNESCO and others, there are indications that construction on these projects is proceeding, despite the fact that developers have not yet received official approval. *See, e.g.*, Patrick Symmes, *Leaping Tiger, Drowning River*, OUTSIDE, Apr. 2007, at 84, 92, available at <http://outside.away.com/outside/destinations/200704/yangtze-river-china-1.html>.

116. Wang Jingzhong, *Most Postponed Projects Granted Go-Ahead for Construction*, XINHUA GEN. NEWS SERV., Feb. 19, 2005.

117. Li Dechao, "Environmental Protection Storm" Attacks "Local Protectionism," 208 REP. OBSERVER 8, 8-15 (2007).

118. *See* Rep. of the Inspection Taskforce, *supra* note 39.

119. Qie, *Ten Categories of Projects to Be Denied Review*, *supra* note 12.

projects.<sup>120</sup> County EPBs are responsible for approving EIA documents for over two-thirds of all construction projects, accounting for over half the total project investments in China.<sup>121</sup> Yet, violations of the EIA Law are common practice and often take the form of “construction without approval,” “constructing a larger scale project with the approval of a smaller project,” and “approval of project without conducting EIA.”<sup>122</sup>

The performance of local governmental officials is assessed by reference to the local GDP growth during their term of office. That is, short-term economic gains determine their career development. Individuals are pressured to give up long-term sustainable development strategies to pursue fast economic growth. It is not rare for local government officials to directly interfere with the review and approval of EIA documents conducted by the local EPBs, though the more common practice is local governments’ approval of investment projects, regardless of whether their EIA documents are prepared and approved, in direct violation of the EIA Law.<sup>123</sup> As a result of local administrations’ keen enthusiasm for promoting economic advancement by attracting investment and supporting industrial development, projects involving outdated and state-prohibited processes, technologies, equipment, and products have been approved without much hesitation. Local EPBs have generally been weak in enforcing the EIA approval regime.<sup>124</sup> This is inherently due to the current institutional structure and administrative operation at the local level. Local governments have complete control over the staffing decisions and annual budget of local EPBs. In the general context of this power relationship, more specific problems emerge during the EIA approval process.

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120. Prompted by an explosion at the China Oil Jilin Petrochemical Company facility and consequent benzene spill into the Songhua River in November 2005, SEPA initiated a nationwide checkup of environmental risks posed by chemical and petrochemical construction projects on February 7, 2006. Press Release, State Env’tl. Prot. Admin., SEPA Initiates Thorough Checkup over New Petrochemical Projects (Feb. 7, 2006). Among 7,555 chemical and petrochemical construction projects, 17.9 percent are located on banks of rivers, lakes, seas, or reservoirs, 32.4 percent are located close to cities or densely populated areas, and 3.7 percent are located in protected zones designated as sources of drinking water. See Press Release, State Env’tl. Prot. Admin., SEPA Announces Results of the Nationwide Check of the Environmental Risks Posed by Petrochemical Construction Projects (July 11, 2006).

121. See Qie Jianrong, *SEPA Punishes Illegal EIAs*, LEGAL DAILY, Dec. 15 2005, at 6.

122. See Rep. of the Inspection Taskforce, *supra* note 39.

123. EIA Law, *supra* note 3, art. 25. The law provides that where the EIA documents of a construction project have not been examined and approved by the environmental authorities, the approval authority of the construction project may not approve the project and the project proponent may not commence construction of the project. *Id.*

124. Qie Jianrong, *County-Level Construction Project Approval Gets Lax Enforcement of Environmental Protection Laws*, LEGAL DAILY, Feb. 14, 2006, at 6.

First of all, no open and transparent approval procedure is formally established, thus leaving the approval authority to individual officers of the EPBs. This has unavoidably subjected individuals to the dilemma of losing or gaining the prospect of promotion and career development when there are clashes between the goals of long-term sustainable development and short-term economic growth. Pan Yue frankly admitted that local environmental officers who resisted pressure from the local governments ended up losing their positions, while those who yielded to it secured theirs.<sup>125</sup> Second, some local EPBs have acted *ultra vires* and approved EIA documents. This is done so as to shorten the approval process and avoid stricter scrutiny by higher-level environmental protection authorities.<sup>126</sup> Third, many local EPBs have inadequate human and financial resources to carry out the necessary scientific and technical study of the EIA documents submitted for their approval. Some environmental officers are not even familiar with the EIA Law and relevant regulations and rules promulgated by the State Council and SEPA.<sup>127</sup> As a result, many approved projects ended up causing serious pollution and environmental disputes at a later stage.<sup>128</sup>

### C. Lack of Post-Decision Monitoring and Compliance Supervision

China's EIA legal regime has traditionally focused on the preparation and approval of EIA documents; there is not much monitoring after approval. The relevant environmental protection authority will not normally carry out inspection until after the construction is completed. Among the projects with EIA documents approved by SEPA or MEP, over 10 percent of them had been put into operation without any inspection, while among those inspected, over 20 percent of the projects were found to have failed to implement the environmental protection measures proposed in their own EIA documents.<sup>129</sup> The "three simultaneities" mechanism in Chinese environmental law requires a polluting source to have environmental protection measures designed, constructed, and put into operation simultaneously with the main project.<sup>130</sup>

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125. Qie, *Ten Categories of Projects to Be Denied Review*, *supra* note 12.

126. Qie Jianrong, *SEPA Punishes Illegal EIA, Three Major Problems with Local EIA Approval*, LEGAL DAILY, Dec. 14, 2005 [hereinafter Qie, *SEPA Punishes Illegal EIA*].

127. Qie Jianrong, *Law Compliance More Costly than Violation: Five Major Problems in Implementing the EIA Law*, LEGAL DAILY, Sept. 19, 2005 [hereinafter Qie, *Law Compliance More Costly than Violation*].

128. The EIA Division of SEPA has openly admitted these problems. *See id.* Jianrong *SEPA Punishes Illegal EIA*, *supra* note 126.

129. *See Rep. of the Inspection Taskforce*, *supra* note 39.

130. The mechanism was written into Chinese environmental law for the first time in 1979. Environmental Protection Law (For Trial Implementation) (promulgated by the

Ideally, the environmental protection measures proposed in an EIA document should follow the same guidelines. Unfortunately, investigation by MEP found that among the projects that have conducted an EIA and have their EIA documents approved, less than half comply with the “three simultaneities” requirement.<sup>131</sup> Some enterprises already in operation have never installed pollution treatment facilities. Others that have installed the relevant facilities only run the facilities when on-site inspections are conducted by environmental protection officers in order to cut down operational costs.

In early 2007, on-site inspection by SEPA of over 100 industrial parks and 500 enterprises in over 100 cities and counties found that over 40 percent of the construction projects lacked any form of post-EIA monitoring.<sup>132</sup> Many project developers who have gone through the EIA process do not treat the environmental mitigation measures proposed in the EIA documents seriously and seldom bother to implement them. Their only concern is to have the EIA documents approved, and once approved, the EIA documents—prepared at a cost of tens and even hundreds of thousands of yuan—are shelved in company archives.<sup>133</sup>

The EIA Law tries to address this problem by including the requirement of post-construction EIA and follow-up inspections by responsible authorities. Where unexpected circumstances occur in the process of construction or operation of a project that are inconsistent with the EIA documents, the project developer is obliged to organize a post-construction EIA, take improvement measures, and report it to both the authority that originally approved the EIA document and the authority that approved the construction project for the record. The environmental authority that originally approved the EIA documents also has the power to order a project developer to conduct a post-construction EIA and adopt rectification measures.<sup>134</sup> The authority is further obliged to carry out follow-up inspection on the environmental impacts generated by the operating project and to investigate and determine the causes

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Standing Comm. Nat'l. People's Cong., Sept. 13, 1979, effective Sept. 13, 1979), art. 6(1) (P.R.C.). Later it was incorporated into the 1989 Environmental Protection Law art. 26. The “three simultaneities” mechanism is also found in all specialized environmental statutes.

131. Bu Xuelin, *Zhou Shengxian Emphasizes Premier Wen Jiaobao's Instruction to Win Environmental Law Enforcement Victory at 2006 Environmental Protection Action Teleconference*, CHINA ENV'T NEWS, June 2, 2006. Zhou Shengxian became SEPA's minister in February 2006 when Xie Zhenhua resigned for failing to initiate the emergency reporting and response mechanism in dealing with the benzene spill that caused severe contamination of the Songhua River in northeastern China.

132. See Rep. of the Inspection Taskforce, *supra* note 39.

133. Liu Weisheng, *Problems in Environmental Impact Assessment in China*, ENVTL. ECON., Mar. 3, 2005, at 18.

134. EIA Law, *supra* note 3, art. 27.

and liabilities where serious environmental pollution or ecological destruction is caused by the project.<sup>135</sup>

#### IV. FROM “STORMS” TO SYSTEM BUILDING

Despite the “storm-like” impact generated by SEPA’s suspension order announced in early 2005, it is well understood that China’s environmental problems cannot be tackled by just one or two storms. SEPA has promised long-term commitment to effective implementation and enforcement of the EIA Law.<sup>136</sup> In addition, there is an urgent need to strengthen China’s EIA legal regime by: (1) amending the EIA Law; (2) carrying out institutional reform at the local level; and (3) strengthening the role of the courts in the EIA process.

##### A. Legislative Reform

The gaps and flaws of the EIA Law can be addressed by: (1) amending the law to include statutory requirements for the consideration of alternatives; (2) incorporating a scoping stage to decide the breadth of EIA documents for individual projects; (3) increasing the penalty for violations by a substantial amount; and (4) enhancing public access to information.

###### 1. Consideration of Alternatives

The EIA Law does not require project proponents to consider alternatives or to include that consideration in EIA documents. Consideration of alternatives to a proposed project should be the first step in the EIA process; “[t]he quality of a decision depends on the quality of alternatives from which to choose.”<sup>137</sup> The comparative analysis of alternatives should be a thorough, systematic, and a well-documented process involving all stakeholders.<sup>138</sup> Documentation provides a final check that

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135. *Id.* art. 28. Based on follow-up inspection of the environmental protection authority, where an engaged EIA institution is found to have prepared false EIA documents, it will be investigated for its legal liabilities according to article 33 of the EIA Law. Where personnel of the examination and approval authority are found to have neglected their duty and/or committed malfeasance and have approved the EIA documents in violation of the law, they will be investigated for legal liabilities according to article 35 of the EIA Law. *Id.*

136. Wang Jingzhong, *China to Be Stricter with Potentially Polluting Factories*, XINHUA GEN. NEWS SERV., Mar. 7, 2005.

137. Anne Steinemann, *Improving Alternatives for Environmental Impact Assessment*, 21 ENVTL. IMPACT ASSESSMENT REV. 3, 3 (2001).

138. BETTY B. MARRIOTT, ENVIRONMENTAL IMPACT ASSESSMENT: A PRACTICAL GUIDE 51 (1997).

the environmental consequences of alternative approaches, locations, and designs to meet the proponents' aims have been considered.<sup>139</sup>

In Hong Kong, consideration of alternatives was the key issue in a high-profile EIA dispute between the former Kowloon-Canton Railway Corporation (KCRC) and the Director of the Environmental Protection Department (EPD).<sup>140</sup> KCRC appealed the director's decision disapproving its EIA report for a proposed spur line connecting Sheung Shui with Lok Ma Chau (Spur Line) to the Environmental Impact Assessment Appeal Board. The Spur Line would have cut across the ecologically sensitive and valuable Long Valley (in the New Territories), which is habitat to rare and precious migratory bird species.<sup>141</sup>

Although the Hong Kong Environmental Impact Assessment Ordinance (EIAO)<sup>142</sup> does not have an express requirement for consideration of alternatives, the Technical Memorandum (TM) promulgated under section 16 of EIAO does.<sup>143</sup> Compared with the EIAO which only outlines the ecological assessment process with little guidance on the principles to be applied, the TM sets detailed requirements. Annex 16 explains how to conduct an ecological assessment:

Areas and/or habitats of ecological importance shall be conserved as far as possible. Any project that is likely to result in adverse ecological impacts in areas of ecological importance shall not normally be permitted unless the project is necessary; it has been proven that *no other practical and reasonable alternatives are available*; and, adequate on-site and/or off-site mitigation measures are employed.<sup>144</sup>

The director refused to approve the EIA report submitted to the EPD for its failure to propose effective mitigation measures and to prove

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139. WOOD, *supra* note 1, at 128.

140. Kowloon-Canton Ry. Corp. v. Dir. of Env'tl. Prot., 2000 No. 2 (Env'tl. Impact Assessment Appeal Bd.), available at [http://www.epd.gov.hk/eia/english/content/files/appeal\\_board\\_2000.html](http://www.epd.gov.hk/eia/english/content/files/appeal_board_2000.html).

141. Long Valley (sometimes known as "core" Long Valley) is an area of predominantly agricultural freshwater wetland of about 33 hectares bounded broadly on the west and northwest by the River Beas and on the east by the River Sutlej. Over 200 different species have been recorded there, 29 of which are of conservation importance. Of particular concern is the Greater Painted Snipe which breeds in the summer in Long Valley. See *Kowloon-Canton Ry. Corp.*, 2000 No. 2.

142. The Environmental Impact Assessment Ordinance [hereinafter EIAO] was promulgated on February 4, 1997 to provide for assessing the environmental impact of certain projects and proposals and for protecting the environment.

143. EIAO § 16.

144. Technical Memorandum on Environmental Impact Assessment Process, Annex 16, § 3.1(a) (emphasis added).

the absence of “practicable and reasonable alternatives.”<sup>145</sup> He found that the Spur Line project would result in adverse environmental impacts in an area of ecological importance, and should not be permitted unless it has been shown to be necessary and that no other practical or reasonable alternatives are available. The director was not satisfied that all alternative means had been explored nor did he believe that all constraints claimed by the KCRC were insurmountable.<sup>146</sup> The director further noted the key principle that the methodology proposed for mitigation should give priority to avoidance of impacts.<sup>147</sup> While the Appeal Board criticized EPD’s study brief for not being as specific as desirable in terms of defining the nature of “alternatives” to be studied, it reconfirmed the status of the TM as a means of setting specific and binding principles and procedures for conducting an EIA and the importance of considering and clarifying “alternatives” at the early stage of issuing the study brief.<sup>148</sup>

Consideration of alternatives adds significant value to the EIA process as a whole, and it should be included in the Chinese EIA Law. Further, it is important to involve the public throughout the selection and evaluation of alternatives. The advantages of engaging the public at this very early stage are that adequate information about the proposed alternatives can be provided and consensus on the most acceptable option is more likely to be reached.<sup>149</sup>

## 2. Incorporating a Scoping Stage

One important stage missing from the statutory EIA process in China is scoping. Scoping establishes the breadth of an EIA document on a case-by-case basis so that the EIA process can stay focused and address all relevant concerns without exhausting limited resources on issues for which there is little or no potential environmental threat.<sup>150</sup> Some regard scoping as the most important stage in the EIA process.<sup>151</sup> By eliminating irrelevant impacts, scoping enables an EIA to focus on the most important issues and ensures that indirect and secondary effects are not over-

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145. *Kowloon-Canton Ry. Corp.*, 2000 No. 2.

146. *Id.*

147. Technical Memorandum on Environmental Impact Assessment Process, *supra* note 144, at § 4.3.1(d).

148. *Kowloon-Canton Ry. Corp.*, 2000 No. 2.

149. WOOD, *supra* note 1, at 127.

150. HOLDER, *supra* note 84, at 38–39.

151. See Joe Weston, *EIA, Decision-Making Theory and Screening and Scoping in UK Practice*, 43 J. ENVTL. PLANNING & MGMT. 185, 198 (2000). If EIA is not focused on the important issues, delays may result from the need to gather more environmental information, and resources may be wasted if minor issues are not eliminated from the assessment.

looked.<sup>152</sup> Scoping is critical to the EIA process as it provides an opportunity for the project proponents and other interested parties to identify relevant and significant issues and concerns and to weed out other issues which are not important and do not merit detailed analysis.

In Hong Kong, scoping is neatly built into the EIA process by EIAO. Prior to carrying out an EIA, proponents of designated projects<sup>153</sup> submit project profiles to EPD in order to apply for a study brief or permission to apply directly for environmental permits.<sup>154</sup> At the time of submitting the project profile, the project proponent is required by EIAO to inform the general public of the proposed project by advertising in both English and Chinese newspapers.<sup>155</sup> Members of the public and the Advisory Council on the Environment (ACE)<sup>156</sup> have 14 days to comment on the project and express their concerns, objections, and recommendations, which should be considered by EPD in its preparation of the study brief.<sup>157</sup> The study brief issued by EPD to project proponents sets the scope of EIA, reflecting valid concerns received during the two-week consultation period and providing guidance and requirements for specific environmental issues to be addressed in the EIA process. This important scoping stage, which involves public comment, professional scrutiny, and government supervision, should be incorporated into the Chinese EIA Law to improve the overall quality of the EIA process.

Involving the public at the scoping stage has important advantages. For example, “[b]y discussing and informing the public of the emerging issues related to the proposed action, agencies may reduce misunderstandings, build cooperative working relationships, educate the public and decision makers, and avoid potential conflicts.”<sup>158</sup> A well-

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152. WOOD, *supra* note 1, at 159.

153. “Designated projects” are those construction projects likely to cause significant adverse environmental impacts during construction and operation. They are listed in schedules 2 and 3 of EIAO. The list may be amended from time to time by the Secretary for the Environment.

154. EIAO § 5(1). The EPD may permit the applicant to apply directly for an environmental permit if it is satisfied that the environmental impact of the designated project is unlikely to be adverse and the mitigation measures described in the project profile meet the requirements of the technical memorandum issued by the EPD. *See* EIAO § 5(11).

155. EIAO § 5(2)(c).

156. The Advisory Council on the Environment (ACE) was set up by the government to review the state of the environment in Hong Kong and to advise the government through the Secretary for the Environment on appropriate measures to be taken to combat pollution and to protect the environment. The Chief Executive appoints the chairman and members. ACE has three subcommittees: EIA subcommittee, waste management subcommittee, and nature conservation subcommittee.

157. EIAO § 5(6).

158. COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT 12 (1997).

designed scoping stage should involve experts who provide independent and professional advice, members of the public with local knowledge who are directly or indirectly affected by the projects, and the environmental protection authorities who play a major role in coordinating the scope of assessment and in supervising the EIA institutions' investigations of the environmental impacts. To ensure both efficiency and equitability of the scoping stage, sufficient information must be made available by the project proponent to allow meaningful participation by concerned stakeholders.

### 3. *Increasing the Penalty for Violations*

The liability provisions of the EIA Law that fail to deter violations and encourage compliance need to be addressed. The EIA Law has to make it much more costly to violate the law than to comply with it.

First of all, the concept of a make-up EIA<sup>159</sup> is flawed. The fundamental purpose of carrying out an EIA prior to the construction of a project is to identify and assess the potential adverse environmental impacts to be generated by construction and operation and to investigate alternative options and ways to prevent and mitigate the adverse impacts before harm is done. A make-up EIA occurs after the construction has started and sometimes close to the completion stage when environmental harm has already occurred and it is too late to consider alternatives or to implement pollution control measures. Although a make-up EIA is probably better than no EIA at all, the EIA Law should by no means create incentives for carrying out make-up EIAs by offering a seemingly better chance of approval and a fast-track approval process. An injunction that suspends construction together with a monetary fine and an order to carry out a make-up EIA within a specified time period should be imposed on project proponents choosing to ignore the EIA process in the first place.

Second, the fine should be much higher than the compliance cost and reasonable in relation to the investment value of the project. The current maximum fine of 200,000 yuan has failed to deter violations.<sup>160</sup> The Hong Kong model may provide valuable guidance in terms of designing legal liabilities for project proponents. Under EIAO, all designated projects need to carry out an EIA and must obtain an environmental permit from EPD before they can start construction. No designated project shall be constructed or operated without an environmental permit or contrary to the conditions of the permit.<sup>161</sup> In addition

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159. See *supra* Part II.D.

160. See Wang, *supra* note 85.

161. EIAO § 9.

to the substantially heavier fine imposed on the violators, which is up to HK\$2 million for the first conviction, HK\$5 million for a second and subsequent conviction, and HK\$10,000 per day for a continuing offense,<sup>162</sup> EIAO also imposes personal liability on individuals in charge of the projects.<sup>163</sup> Imposing an increased fine for second and subsequent violations can deter repetitive violations. Adding a fine calculated on a daily basis can effectively suspend the violation. Also, holding individuals personally liable discourages intentional and reckless violations by companies.

Third, even if monetary penalties can be increased to a proper level, they should not be the only form of liability imposed on project proponents in violation of the EIA Law. The “polluter pays” principle requires those who pollute to clean-up and provide treatment, and those who cause environmental destruction to carry out restoration.<sup>164</sup> One leading Chinese environmental law scholar has suggested an administrative sanction in the form of an order to suspend operations and to restore the site to the pre-construction state. Where restoration is impossible, the party shall be ordered to implement environmental protection measures within a prescribed time period.<sup>165</sup>

Last but not least, a fundamental change in the mindset of lawmakers and policymakers is essential for them to accept and adopt sustainable development strategies. China’s environmental legislation tends to protect polluting industries by imposing too low of a cap on the maximum penalty for environmental violations. This preference of development over environment is found in the legislative intent of the Environmental Protection Law, which aims at “promoting the development of socialist modernization and construction”<sup>166</sup> to “ensure environmental protection work will be coordinated with economic construction and so-

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162. Starting construction without a valid environmental permit carries the criminal liability of a maximum fine of HK\$2 million and imprisonment of six months upon the first conviction. The liability is increased to a maximum fine of HK\$5 million and imprisonment of two years on a second or subsequent conviction. Where the offense is of a continuing nature, an additional fine of HK\$10,000 per day is imposed. *See* EIAO § 26(1).

163. Individuals including director, manager, secretary, or any other person concerned in the management of the company that is convicted for violation of the EIAO may be held personally liable if the offense was committed with their consent, connivance, or was attributable to any neglect or omission on their part. *See* EIAO § 29(1).

164. HAN DEPEI ET AL., *TEXTBOOK ON ENVIRONMENTAL PROTECTION LAW* 78–80 (5th ed. 2007).

165. Professor Wang Canfa made the recommendation on the draft EIA Law. *See* Wang Canfa, *Discussion on Several Issues in Drafting the Chinese EIA Law*, CHINESE ENV’T NEWS, Mar. 9, 2001, <http://www.envir.gov.cn/info/2001/3/39229.htm>.

166. *Env’tl. Prot. Law*, *supra* note 26, art. 1.

cial development.”<sup>167</sup> Imposing heavier fines or driving dirty industries out of business not only affects “economic construction,” but also contravenes the goal of coordinating environmental protection with social and economic development, as shutting down factories causes job and local revenue losses leading to economic and social instability. In addition, any attempt to significantly increase the fine and punishment for environmental violations is always strongly objected to and effectively obstructed by “sectoral protectionism” in the legislative process.<sup>168</sup> The supervising ministries and departments of relevant industries tend to focus purely on the economic interests of the sector, instead of taking a long-term and more integrated approach to sustainable development.

#### 4. *Enhancing Public Access to Information*

An EIA is not only “a technical aid to better-informed government decision-making, but also . . . a means to inform the public about the environmental impacts of proposed government actions enhancing transparency, accountability, and public participation in governmental decision-making.”<sup>169</sup> Public participation is meaningful only if EIA documents are made public at each stage of the EIA process, including the scoping stage and upon completion of the EIA report. The documents need to be readily available at a number of locations convenient to those most likely to be affected by the proposed project. The documents also need to be accessible in the sense of being clear and comprehensible.<sup>170</sup>

The United States has, through the National Environmental Policy Act (NEPA) and the EIA mechanism, opened up governmental decision-making processes to public scrutiny, leading to an unprecedented level of public participation in the EIA process.<sup>171</sup> In Hong Kong, the government plays a key role in ensuring public access to the complete set of EIA documents for a proposed project. This is achieved through the statutory requirement that the director of EPD is to keep a register.<sup>172</sup> The register contains a full set of EIA-related documents including: project profiles submitted by project proponents, EIA study briefs issued by EPD, the director’s decisions on the applications for permission to apply directly

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167. *Id.* art. 4.

168. Wang Xi & Wan Jinbo, *A Few Thoughts on China’s EIA Legislation*, *LAW REV.* 115 (Jan. 2001); *See* Wang, *supra* note 85.

169. *See* Bradley C. Karkkainen, *NEPA and the Curious Evolution of Environmental Impact Assessment in the United States*, in *TAKING STOCK OF ENVIRONMENTAL ASSESSMENT: LAW, POLICY AND PRACTICE* 45, 50 (Jane Holder & Donald McGillivray eds., 2007).

170. *See generally* SHEATE, *supra* note 65.

171. *See generally* COUNCIL ON ENVTL. QUALITY, *THE NATIONAL ENVIRONMENTAL POLICY ACT: A STUDY OF ITS EFFECTIVENESS AFTER TWENTY-FIVE YEARS* (1997).

172. EIAO §15.

for an environmental permit, EIA reports submitted by project proponents, the director's decisions on the EIA reports, applications for environmental permits, the director's decisions on the applications for environmental permits, and other matters required by regulations.<sup>173</sup> The register is open for inspection by the public free of charge during normal office hours.<sup>174</sup> Further, the EPD provides free online access to all EIA documents kept in the EIA Ordinance Register Office.

Compared to United States and Hong Kong practice, the information made available under the EIA Law and the relevant regulations and rules in China is far too limited and has hindered meaningful public participation. There is an urgent need for the government to play a more active role in facilitating the full disclosure of information and providing easy access to complete EIA documents by the general public. This can be achieved by redefining "government information" in the Regulation on Disclosure of Government Information, or making it compulsory for the project proponents to disclose all EIA-related information and documents as "enterprise information" under the Measures on Disclosure of Environmental Information (for Trial Use).

## B. Systemic Reform

An EIA is ultimately about adapting values and attitudes to a different approach to development. Inserting the EIA mechanism into an existing decision-making process as a mere formality often results in a poor quality and ineffective EIA. While it takes time to completely change the mindset and the behavior of local governments, there are potential solutions that could improve environmental enforcement at local levels.

Institutional restructuring to detach local EPBs from the same level as the local government in terms of staffing and budgeting would enhance the power and independence of local EPBs. The supervision and monitoring function of local EPBs would be significantly improved if they no longer relied on local governments for allocation of financial and human resources. Ideally, creating a vertical instead of horizontal administrative supervisory system would leave each level of an EPB subject only to the direct supervision of the environmental protection authorities at the next higher level. However, it may take a long time for this structural change to come to fruition.

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173. *Id.* at § 15(1).

174. *Id.* at § 15(2). Effective July 1, 2006, the operating hours of the EIA Ordinance Register Office have been changed to 9:00 A.M. through 5:00 P.M. on Monday through Friday; the office is closed on Saturdays, Sundays, and public holidays.

A more realistic and achievable alternative is to reform the performance assessment scheme for government officials. The current appraisal system penalizes governmental officials who adopt long-term sustainable development strategies while rewarding those who have achieved short-term GDP growth at the cost of the environment. SEPA started exploring the possibility of incorporating “green GDP” in the appraisal system that considers four essential elements, including enforcement of environmental laws and regulations, pollution level, change of environmental quality, and public satisfaction.<sup>175</sup> Green GDP takes into account the cost of environmental pollution, ecological degradation, and natural resource depletion so that a more accurate picture of social wealth and resources status can be considered by policymakers in promoting sustainable development. Ideally, one’s achievement is not only reflected in the economic gains, but also the costs in achieving economic growth.<sup>176</sup>

### C. Judicial Reform

The success of the public in influencing government decision-making in the United States through NEPA is usually traced to two factors. One is the right to participate and gain access to relevant documentation, and the other is the public right of appeal against EIA decisions in the courts.<sup>177</sup> Members of the public, including environmental groups, have taken advantage of the leverage provided by the EIA mechanism in NEPA to oppose environmentally harmful government projects by means of judicial review.

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175. Press Release, State Env'tl. Prot. Admin., Xie Zhenhua Emphasizes Implementation of the Scientific Development Principle to Build a Resource-Efficient and Environmentally Friendly Society at the National Environmental Protection Work Conference (Jan. 25, 2005). “Green GDP” deducts environmental and ecological costs from economic performance, and therefore more accurately reflects a country’s rate of economic development. For example, China’s economy was reported as experiencing an average annual GDP growth rate of 8.7 percent from 1985 to 2000. Yet, the GDP growth rate is closer to 6.5 percent when environmental costs and ecological deficits are taken into account. Li Lin, *Behind the 2005 Environmental Protection Storm*, MGMT. & FORTUNE, Mar. 2005, at 22.

176. Chen Zhong & Chen Chuyue, *China Calls for an Era of Ecological Civilization*, S. WINDS WINDOW, Feb. 2005, at 12–19, available at <http://trijif.bokee.com/3677301.html>. A year-long trial to set up a green GDP calculation system was conducted in 10 municipalities and provinces from February 2005 to February 2006 with the joint effort of SEPA and the National Bureau of Statistics. The trial calculations consisted of four stages: investigation, technical preparation, overall calculation, and assessment. The exercise was conducted in Beijing, Tianjin, Chongqing, Hebei, Liaoning, Zhejiang, Anhui, Guangdong, Hainan, and Sichuan. See Wang Jingzhong, *China Starts Trial Calculation of Green GDP*, XINHUA NEWS AGENCY, Feb. 28, 2005.

177. WOOD, *supra* note 1, at 280.

Courts can be a crucial force in changing agency behavior to integrate environmental considerations into the decision-making process. Since China embarked on the task to rebuild its legal system in the late 1970s, there has been a growing awareness among ordinary people that they can sue in courts to settle disputes and seek remedies, though usually as a last resort. The enactment of the Administrative Procedure Law<sup>178</sup> in 1989 broke new ground by making it possible for private parties to sue the government, which was beyond imagination in traditional China. The emergence of environmental non-governmental organizations (NGO), such as the Center of Legal Aid for Pollution Victims (the Center) established at China University of Political Science and Law, offers hope that individuals may obtain professional assistance free of charge or at minimal cost in fighting legal battles against both polluters and government agencies.

The first administrative litigation under the EIA Law was initiated with the assistance of the Center. Two villagers in Dingzhou, Hebei Province, sued Dingzhou EPB for unlawfully approving the EIA statement for a heavy polluting project run by Bei Wangjiazhuang Rare Metal Abstraction Factory. The project disposed of 500 tons of waste photographic paper and sullage by incineration and calcination to recover two tons of silver annually. It paid the Geophysics Survey Institute of China Metallurgy Geologic Examination Engineering Administration to prepare the relevant EIA statement in February 2004, which was later approved by Dingzhou EPB in March of the same year. The factory, located only 150 meters away from the villagers' homes, was not equipped with any environmental protection facilities and generated excessive toxic and noxious substances. Both Dingzhou Basic-level People's Court and Baoding Intermediate People's Court refused to accept the case, holding that the two villagers did not have standing to sue Dingzhou EPB for the alleged unlawful approval of the EIA statement.<sup>179</sup> According to the Inventory on Classified Management of Environmental Protection of Construction Projects, as a result of the courts' failure to invalidate the EPB's unlawful approval, the Center's complaints to SEPA resulted in SEPA's conclusion that the project's disposal of dangerous and hazardous wastes requires the preparation of an EIA report based on a comprehen-

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178. Administrative Procedure Law (promulgated by the Standing Comm. Nat'l People's Cong., Apr. 4, 1989, effective Oct. 1, 1990) (P.R.C.) [hereinafter Admin. Proc. Law].

179. Judgment of Hebei Province Baoding Intermediate People's Court (Nov. 21, 2005) (on file with author); see also Jianrong, *Law Compliance More Costly than Violation*, *supra* note 127. Both courts based their decision on the lack of direct injury to the two villagers caused by the local EPB's administrative act.

sive technical assessment instead of the brief EIA statement.<sup>180</sup> SEPA further penalized the relevant EIA institution with a six-month suspension of its qualification certificate.<sup>181</sup> However, neither the courts nor SEPA clarified the legal liability of Dingzhou EPB for approving the EIA statement that was prepared in violation of the EIA Law and regulations.

Without a doubt, judicial review of the administrative approval of EIA documents can provide an additional check on agency behavior and improve the quality of the approval process. In turn, this would significantly strengthen the role and function of EIA as a regulatory tool to prevent environmental harm. There are, however, still tremendous obstacles for the public to overcome in monitoring and rectifying local EPBs' decisions through administrative litigation in China.

The restrictive standing rule set by the Administrative Procedure Law virtually prevents members of the public or environmental NGOs from seeking judicial review of an administrative act such as the approval of EIA documents. Under Article 2, any citizen, legal person, or any other organization has the right to bring a suit before a people's court if his or its lawful rights and interests have been infringed upon by a specific administrative act of an administrative organ or its personnel.<sup>182</sup> However, the party needs to meet the following criteria in order to bring an administrative lawsuit:

- (1) the plaintiff must be a citizen, a legal person or any other organization that considers a specific administrative act to have infringed upon his or its lawful rights and interests;
- (2) there must be a specific defendant or defendants;
- (3) there must be a specific claim and a corresponding factual basis for the suit; and
- (4) the suit must fall within the scope of cases to be accepted by the people's courts and the specific jurisdiction of the people's court where it is filed.<sup>183</sup>

This standing requirement has been applied restrictively by the courts to limit plaintiffs in administrative litigation to those directly affected by the administrative act and who can demonstrate the impairment of a right under Article 11, which provides a list of eight categories of concrete administrative acts subject to judicial review.<sup>184</sup> Individuals and en-

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180. SEPA Office, Circular on the EIA Work Conducted by the China Metallurgy Geologic Examination Engineering Administration's Geophysics Survey Institute (Huanban No. 135, Dec. 9, 2005).

181. *Id.* The suspension was from December 1, 2005, to May 31, 2006.

182. Admin. Proc. Law, *supra* note 178, art. 2.

183. *Id.* art. 41.

184. *Id.* art. 11. This article provides that

vironmental NGOs that have tried to seek judicial review of the EIA approval decisions made by administrative agencies have mostly been rejected by the courts. It is an arduous task to get the Chinese courts to play a more active role in the EIA legal regime under the current restraints.

There is an urgent need to reform the restrictive standing rules to facilitate the development of public interest environmental litigation in China<sup>185</sup> so that the public can play a more effective and influential role in monitoring and supervising development projects.

## V. CONCLUSION

Within a quarter-century, China has accomplished the largest-scale industrialization and urbanization in the history of civilization. This has, however, been achieved at the cost of heavy environmental pollution, serious ecological degradation, and devastating depletion of natural resources. China is now the world's biggest generator of sulphur dioxide and ozone-depleting substances (ODS) and was ranked second only to the United States in carbon dioxide emissions until 2006 when it

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[t]he people's courts shall accept suits brought by citizens, legal persons or other organizations against any of the following specific administrative acts: (1) an administrative sanction, such as a detention, fine, rescission of a license or permit, order to suspend production or business or confiscation of property, which one refuses to accept; (2) a compulsory administrative measure, such as restricting freedom of the person or the sealing up, seizing or freezing of property, which one refuses to accept; (3) infringement upon one's managerial decision-making powers, which is considered to have been perpetrated by an administrative organ; (4) refusal by an administrative organ to issue a permit or license, which one considers oneself legally qualified to apply for, or its failure to respond to the application; (5) refusal by an administrative organ to perform its statutory duty of protecting one's rights of the person and of property, as one has applied for, or its failure to respond to the application; (6) cases where an administrative organ is considered to have failed to issue a pension according to law; (7) cases where an administrative organ is considered to have illegally demanded the performance of duties; and (8) cases where an administrative organ is considered to have infringed upon other rights of the person and of property. Apart from the provisions set forth in the preceding paragraphs, the people's courts shall accept other administrative suits which may be brought in accordance with the provisions of relevant laws and regulations.

*Id.*

185. For the latest discussion on public interest environmental litigation in both civil and administrative disputes, see *PUBLIC INTEREST ENVIRONMENTAL LITIGATION* (Bie Tao ed., 2007).

may have surpassed the United States according to a Dutch study.<sup>186</sup> Seventy percent of the rivers in China are contaminated, one-third of Chinese cities have serious air pollution problems, less than 20 percent of municipal solid waste and only 30 percent of industrial toxic waste are properly treated, and one-third of the land is eroded by acid rain.<sup>187</sup> A report jointly published by SEPA and the National Bureau of Statistics revealed that the total economic loss directly caused by environmental pollution amounted to 511.8 billion yuan in 2004, accounting for 3.05 percent of the annual GDP, and the projected treatment cost amounted to 287.4 billion yuan, which is 1.80 percent of the annual GDP.<sup>188</sup> Full implementation and effective enforcement of the EIA regime offers hope to reverse the current unsustainable development pattern.

EIA is part of a wider approach to environmental protection and is influenced by the system of which it is an element. “[T]he more committed a jurisdiction is to environmental policy, the more influence an EIA will have over decision-making.”<sup>189</sup> The political nature of the decision-making context of an EIA is inescapable. Every EIA procedure operates within a political, legal, administrative, and policy context particular to the jurisdiction concerned:

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186. Wang Yuqing, Vice Minister of SEPA, admitted the grave environmental status in China when delivering a speech on “China’s Environmental Protection in the New Ages” at the Annual Conference of the Chinese Academy of Environmental Science on November 20, 2006, available at [http://www.zhb.gov.cn/info/ldjh/200611/t20061127\\_96584.htm](http://www.zhb.gov.cn/info/ldjh/200611/t20061127_96584.htm). The study conducted by the Netherlands Environmental Assessment Agency first found that China’s CO<sub>2</sub> emissions in 2006 surpassed those of the United States by 8 percent. See Press Release, Netherlands Env’tl. Assessment Agency, China Now No. 1 in CO<sub>2</sub> Emissions, USA in Second Position (June 19, 2007), available at <http://www.mnp.nl/en/service/pressreleases/2007/20070619ChinaNowNo1inCO2emissionsUSAinsecondposition.html>. See also John Vidal & David Adam, *China Overtakes U.S. as the World’s Biggest CO<sub>2</sub> Emitter*, THE GUARDIAN, June 19, 2007, <http://www.guardian.co.uk/environment/2007/jun/19/china.usnews>. The Dutch study further revealed that China’s CO<sub>2</sub> emissions in 2007 were estimated to be 14 percent higher than those from the United States. See Press Release, Netherlands Env’tl. Assessment Agency, China Contributing Two-Thirds to Increase in CO<sub>2</sub> Emissions (June 13, 2008), available at <http://www.mnp.nl/en/service/pressreleases/2008/20080613ChinacontributingtwothirdstoincreaseinCO2emissions.html>. See also Elisabeth Rosenthal, *China Increases Lead as Biggest Carbon Dioxide Emitter*, N.Y. TIMES, June 14, 2008, <http://www.nytimes.com/2008/06/14/world/asia/14china.html>.

187. Pan Yue, Vice Minister of SEPA, discussed the variety of environmental and ecological problems that China must tackle as a matter of urgency when delivering a speech on “Some Thoughts on China’s Environmental Problems” at the First National Environmental Policy and Law Work Conference on December 12, 2006, available at [http://www.zhb.gov.cn/info/ldjh/200701/t20070118\\_99754.htm](http://www.zhb.gov.cn/info/ldjh/200701/t20070118_99754.htm). See also SUN, *supra* note 16, at 133.

188. Press Release, State Env’tl. Prot. Admin., SEPA and National Bureau of Statistics Promulgate China Green National Accounting Study Report (Sept. 7, 2006).

189. WOOD, *supra* note 1, at 2.

EIA effectiveness is associated with changing political regimes and with the changing level of support for the EIA process among courts, chief executives, and senior agency managers that this implies. The way an EIA process is formally structured and the way structure taps informal incentives for administrative behaviour are, equally clearly, important variables.<sup>190</sup>

The information generated by the EIA process is considered within a political decision-making arena, and is therefore influenced by its norms and values, as well as by its procedures. Any changes to the decision-making process resulting from an EIA will be changes resulting from the evolution of the values and perspectives held by decision-makers or from successful public intervention. As EIAs take place in a political context as a policymaking tool, it is inevitable that economic and sociopolitical factors will outweigh environmental factors in many instances.<sup>191</sup> Nevertheless, an EIA can be more effective where environmental values are both implicit and consensual in the national culture and explicit in public law and policy.<sup>192</sup>

The series of decisive and proactive actions taken by China's top environmental authority since 2005 indicates that the implementation and enforcement of the EIA Law may be able to develop into a routine operation, instead of random campaign-style "storms." Hopefully, with continuing improvements to the EIA Law and regulations and a long-term governmental commitment to implementation and enforcement of the rules and provisions, China's EIA regime will no longer be seen as a mere formality or rubber stamp. By integrating environmental considerations into the decision-making process at the earliest stage possible to mitigate the potential environmental harm of development projects, the EIA regime can truly function as an effective decision-making tool for China to engage in more sustainable and harmonious socio-economic development.

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190. Geoffrey Wandesforde-Smith, *Environmental Impact Assessment, Entrepreneurship, and Policy Change*, in *POLICY THROUGH IMPACT ASSESSMENT: INSTITUTIONALIZED ANALYSIS AS A POLICY STRATEGY* 155, 165 (Robert V. Bartlett ed., 1989).

191. WOOD, *supra* note 1, at 221–39.

192. Lynton K. Caldwell, *Understanding Impact Analysis: Technical Process, Administrative Reform, Policy Principle*, in *POLICY THROUGH IMPACT ASSESSMENT: INSTITUTIONALIZED ANALYSIS AS A POLICY STRATEGY* 7, 12 (Robert V. Bartlett ed., 1989).