# Impact Assessment in China and the United States: A Comparison

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Summary

Environmental impact assessment (EIA) is a fundamentally important part of the legal systems in both the United States and China. In this Article, the authors compare and contrast the development of EIA in the two countries, including (1) an introduction to EIA in China, (2) the U.S. experience with EIA, (3) challenges to EIA in China, and (4) the latest development of EIA in China. They conclude that with a series of proactive actions taken by the Chinese Ministry of Environmental Protection, 2015-16 has been a milestone in the development of the EIA process in China. However, many provisions of the Chinese regulations and documents are too general to be enforced, and should be further consolidated by additional rulemaking.

Both China¹ and the United States have environmental impact assessment (EIA) laws. They have in common the basic purpose of such laws: to predict adverse environmental impacts of actions before they are undertaken—"looking before you leap environmentally"—so that such impacts may be avoided or minimized. But the two sets of laws and practices also have their differences, stemming in part from different sets of institutions and means of governance. That said, the elements of EIA common to the two nations and, indeed, common to EIA practice worldwide, far exceed the points of difference.

We, one Chinese and one American lawyer, have collaborated on this Article. Our intended audience is not limited to readers in these two nations, and each of us has learned from the other's experience and, indeed, from generally accepted worldwide EIA best practices. Our hope is that the Article will prove useful to EIA practitioners as well as government officials, academicians, nongovernmental organizations (NGOs), and the public in general.

#### I. An Introduction to EIA in China

# A. Development of Legislation

The concept and practice of EIA in the People's Republic of China (PRC) can be traced back to the early 1970s. The promulgation of the PRC Environmental Protection Law (Trial) in 1979 signifies the formal introduction of EIA into China's legal system, which required that an EIA be approved by a competent environmental protection bureau (EPB) before commencement of any construction project.

In 1981, the State Council's Environmental Protection Commission (EPC), the earliest predecessor of the Ministry of Environmental Protection (MEP), issued an administrative order, the *Measures of Environmental Management* 

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 For purposes of this Article, China means the People's Republic of China, excluding Hong Kong SAR, Macau SAR, and Taiwan. for Basic Construction Projects (Measures), for the implementation of EIAs. The Measures required an EIA to be prepared for a new or expanded project prone to pollution. In addition, the Measures also specified the scope, background, and procedure of an EIA.

The Measures were revised in 1986 and the revised version specified more details in the course of implementing an EIA, including preparation and review procedures, approval authority and responsible parties, detailed requirements of an environmental report, EIA practitioners' qualification and certification system, and, in particular, the identification of the EIA report and EIA form. In 1998, the Measures were revised again and renamed the *Regulations of Environmental Management for Construction Projects* by the State Council, and thus became an administrative law with a higher level of legislation.

Meanwhile, a detailed project classification catalogue for EIA, the Classification and Management Catalogue on Environmental Protection of Construction Project (Trial) (Trial Catalogue), was issued in 2002 by the State Administration of Environmental Protection (SAEP), the predecessor of the MEP after the EPC. After several revisions, the latest version of this catalogue is now the Classified Administration Catalogue of Environmental Impact Assessment for Construction Projects (2015 Revision) (2015 Catalogue), issued by the MEP. It is in the Trial Catalogue and its updated versions that three forms of an EIA, namely an EIA report, an EIA reporting form, and an EIA registration form, were officially introduced into and implemented in China.

After the rapid development of EIA for more than 20 years, EIA was written into law, the highest form in the legislation system in China. The *PRC Environmental Impact Assessment Law* (EIA Law) was promulgated by the National People's Congress in 2002 and came into force in 2003. The EIA Law covers the environmental assessment of both governmental plans (planning EIA) and construction projects (project EIA). Nevertheless, the EIA Law has been criticized for its mismatch with the dramatic economic growth and ever-increasing pressure on environmental systems.<sup>2</sup> Thus, there has been a strong public call to revise this law to more closely align with the new economic and social environments.

On July 2, 2016, a decision on revising the EIA Law was made by the Standing Committee of the National People's Congress, and the new law (New EIA Law) took effect on September 1, 2016. Several significant revisions have been made to the project EIA, including: (1) project EIA approval is a condition precedent for initiating construction; (2) soil and water conservation approval is not required for the purpose of conducting an EIA; (3) industry preliminary examination is not required; (4) the EIA registration form applies to the filing system; and (5) the cost of violating the New EIA Law substan-

## B. Summary of Key Contents of the Law

# I. Categories of ElAs

In general, EIAs in China are classified into two categories: planning EIAs and project EIAs.

Planning EIAs: It should be noted that not all governmental plans require an EIA. Only plans relating to the economy and having an environmental impact are subject to a planning EIA. The planning EIA includes: (1) comprehensive plans; and (2) project-related plans.

Comprehensive plans refer to plans for utilization of land for construction or development and utilization of certain areas. The authority that draws up the comprehensive plans is required to prepare a written environmental impact chapter (EIC) or environmental impact statement (EIS). Project-related plans refer to plans for the development of industry, transportation, urban construction, and so on. The authority that draws up the project-related plans is required to prepare a written environmental impact report (EIR).

Project EIAs: There is not a specific definition of "construction plans" in the EIA Law. But in a notice promulgated by the SAEP in 1999, a "project" is defined to include all types of development and construction activities through fixed assets investment, which could be funded by the government, collective economic organizations, joint venture and foreign capital, capital from Hong Kong, Macao, Taiwan, and individual business.<sup>3</sup> After a construction entity submits a project proposal, an immediate decision is made on whether and which type of EIA is required, which is determined by the EIA law, Regulations on Environmental Protection Management for Construction Projects 1998 (1998 Regulations), as well as the 2015 Catalogue.

In China, construction projects are generally categorized into three groups based on the level of sensitivity of a project:

(1) For a construction project that may have a potential significant environmental impact, an EIA report is required, which shall comprehensively and thoroughly assess the pollution arising from the construction project and its impact on the environment;

tially increases. The planning EIA was also amended but not as significantly or substantially as the project EIA. For instance, the amendment requires an authority that drafts the ad hoc plan to revise the plan based on the conclusion of the environmental impact report and the opinion of the inspection panel. If the approval authority decides not to adopt the aforesaid conclusion and opinion, it needs to give an explanation. The details will be discussed later in the Article.

Yan Wang et al., Environmental Impact Assessment of Projects in the People's Republic of China: New Law, Old Problems, 23 ENVIL. IMPACT ASSESSMENT REV. 543-79 (2003), available at http://www.sciencedirect.com/science/article/pii/S0195925503000714.

MINISTRY OF ENVIRONMENTAL PROTECTION OF THE PRC, NOTICE ON ISSUES RELATED TO THE IMPLEMENTATION OF THE CONSTRUCTION PROJECT ENVIRONMENTAL IMPACT ASSESSMENT SYSTEM (1999), available at http:// www.zhb.gov.cn/gkml/zj/wj/200910/t20091022\_171921.htm.

- (2) For a construction project that may have a light impact on the environment, an EIA reporting form is required, which analyzes or addresses specific aspects of the pollution arising from the construction project and its impact on the environment;
- (3) If the impact of a construction project on the environment is so minor that it is unnecessary to carry out an EIA, the project owner only needs to complete an EIA registration form.

#### 2. Contents of EIAs

Planning EIAs: An EIC or EIS shall cover the following:

- Analyses, forecast, and appraisals of the potential environmental impacts of a plan at its start. These mainly include analysis of the load capacity of the environment and resources, analysis and forecast of the negative environmental impacts, and analysis of the level of coordination between the plan and the environment;
- (2) Measures and countermeasures for preventing or mitigating negative environmental impacts. These mainly include policies and administrative or technical measures for preventing or mitigating negative environmental impacts.<sup>4</sup>

Apart from the aforesaid information, an EIA report shall also include a conclusion of the EIA. The conclusion shall cover issues such as the environmental reliability and feasibility of the draft plan, the reliability and effectiveness of the measures and countermeasures for preventing and mitigating environmental impacts, and a suggested revision for the draft plan.<sup>5</sup>

Project EIAs: EIA reports and EIA reporting forms must be produced by licensed EIA institutions and practitioners. The construction entities usually contract licensed institutions to conduct the EIA and to prepare the EIA report or EIA reporting form. According to the 1998 Regulations, the content of an EIA report needs to include the following:

- (1) A description of the proposed project;
- (2) The present environmental condition;
- (3) Predictions and analysis of the environmental impact;
- (4) Economic and technical analysis of mitigation measures;
- (5) Cost-benefit analysis (CBA) of the environmental impact;
- (6) Proposals for monitoring the project;
- (7) Conclusions of the EIA;

(8) The contents and format of the EIF and EIRF should follow the instructions (including templates) issued by the MEP.

#### 3. Examination of EIA Documents

Planning EIAs: For comprehensive plans, the EIC or EIS is not subject to review by the authority. But for ad hoc plans, representatives and specialists from relevant governmental authorities shall examine the EIR. In the New EIA Law, the authority that drafts the ad hoc plan is required to revise the plan based on the conclusion of the EIR and the opinion of the inspection panel. If the approval authority decides not to adopt the aforesaid conclusion and opinion, it needs to give an explanation.

Project EIAs: The documents for evaluation of the environmental impacts of a construction project shall be submitted by the construction unit (project owner) to the competent authority in charge of environmental protection. Notably, the New EIA Law has made several amendments to the examination of a project EIA: (1) soil and water conservation approval is no longer a condition precedent for EIA approval. (2) Industry preliminary examination for the EIR and EIS is not required. This examination was once conducted by an industry regulator if the project was from a special industry (such as shipping, banking, or education). However, Article 22 of the New EIA Law abolishes such an industrial preliminary examination before the EIA approval. (3) The EIA registration form applies to the filing system rather than examination and approval. Unlike the EIA report and EIA reporting form, the EIA registration form will no longer be subject to examination and approval, but to a filing system according to Article 22 of the New EIA Law.

EIA and the "three simultaneously" approach constitute the two pillars in the environmental protection management of construction projects. The "three simultaneously" system means that environmental protection facilities, which need to be associated with a construction project, shall be (1) designed, (2) constructed, and (3) commissioned simultaneously with the principal part of the project. EIA reflects the principle of "prevention first," while the "three simultaneously" system is the management tool during the development of a project used to implement the measures taken for pollution prevention and control.

#### 4. Post-EIA Assessment

EIA approval has been one of the most important preapprovals as well as preconditions of achieving the final approval of the National Development and Reform Commission (NDRC), the most powerful authority in China, or its local counterparts, for a construction project. However, according to Article 25 of the New EIA Law, EIA approval will no longer be a condition precedent for the approval of a project, but a condition precedent for the commencement of the project construction. This implies that the period

Article 11 of the Regulation on the Environmental Impact Assessment of Plans.

<sup>5.</sup> *Id*.

for obtaining EIA approval has been extended—i.e., such approval can be achieved even after the approval of the project by NDRC or its local counterparts, but prior to actual project construction.

In the course of project construction, EPBs are authorized to monitor how the approved EIA documents are observed and executed during the construction and operation stages of the project, which is also a requirement of the "three simultaneously" approach. Upon the completion of a construction project, the project owner is required to file an application with an EPB for inspection and approval of the environmental protection facilities. An approved inspection and acceptance application report is often a precondition to start the formal commercial operation of the project. For certain projects, like photovoltaic power generation, the approved report is a condition precedent for obtaining national subsidies.

After December 2015, when MEP promulgated Administrative Measures for the Environmental Impact Post-Assessment of Construction Projects (Trial), the following projects are subject to an environmental impact post-assessment (EIPA) by competent EPBs, provided that the actual operation is not in compliance with the approved EIA report:

- Construction projects such as a water conservatory, hypo-power station, excavation, port, or railway with a substantial impact on the natural environment, and with major environmental impacts that gradually appear during a certain period of time after completion of the construction, as well as construction projects in other industries going across key ecosensitive areas;
- Construction projects from metallurgical, petrochemical, and chemical industries, with environmental risks, a sensitive location, and discharge of heavy metal or lasting organic pollutants;
- Other construction projects deemed subject to EIPA by a competent environmental authority.

Two implications should be recalled in addition to the conditions above:

- Only those construction projects subject to an EIR will be subject to an EIPA (i.e., those projects with less environmental impacts are not subject to an EIPA); and
- Construction projects are not subject to an EIPA if the operations of a project comply with the approved EIA report.

#### II. The U.S. Experience With EIA

The following section discusses both the U.S. experience with EIA—which has served as a model internationally—and international agreements on EIA that provide widely accepted norms for the application of such laws worldwide. It is our hope that such shared examples—including what

works and what does not work—will prove useful to China as it progresses in the implementation of its own EIA law and processes.

# A. Background on the National Environmental Policy Act

In the United States, President Richard Nixon signed the National Environmental Policy Act (NEPA)<sup>6</sup> into law on January 1, 1970, as his first official act of the new decade. While heralded as the nation's most significant environmental enactment, the early years of implementing NEPA were sluggish. The government officials responsible for implementing the new law did not, for the most part, know what to do. Moreover, NEPA contained no enforcement mechanism. Each agency of the federal government was responsible for that agency's implementation of the Act, but there was no oversight agency with the power to insist on full and adequate compliance with the law.

NEPA did, however, create the Council on Environmental Quality (CEQ), a small agency strategically located within the president's executive office. While CEQ lacked the power to overturn other agencies' decisions under NEPA, President Nixon by executive order gave CEQ the authority to adopt "guidelines" to assist agencies in implementing the new statute. While the guidelines were not mandatory, they provided informed guidance on how to implement the new law and assisted in achieving a uniformity of approach throughout the government.

Those guidelines performed a great and needed service. They delineated what was required in an EIS, the most detailed type of analysis that would be required under NEPA. They also provided for an environmental assessment (EA), a much briefer document designed to determine whether a full EIS was needed, while at the same time ensuring that relatively minor projects and actions also received some measure of environmental analysis. The guidelines made clear that NEPA applied not only to directly undertaken governmental activity (such as building a dam or a highway), but also to governmental permission of private activity, as long as some sort of federal permit or funding was involved—usually covering all significant projects (such as constructing a private industrial plant or mining on federal lands).

But NEPA still lacked an enforcement mechanism. There was no independent entity outside of the agency responsible for preparing the NEPA document that had the ability to review and, if necessary, reject the EIS or EA prepared by the lead agency if that NEPA document was inadequate; or, indeed, to stop a project if it was approved without compliance with NEPA. In a manner typical of U.S. practice but not universally accepted in other nations, the judiciary provided that independent enforcement mechanism. Using the Administrative Procedure Act (APA),<sup>7</sup> the U.S. law of general application allowing

<sup>. 42</sup> U.S.C. §\$4321-4370(h), ELR Stat. NEPA \$\$2-209

<sup>7. 5</sup> U.S.C. §\$551-559.

review of governmental actions alleged to be arbitrary or procedurally defective, affected plaintiffs took the agencies to court for an independent review of an agency's NEPA compliance.

NEPA, in part because of its procedural nature, lent itself to judicial review and enforcement. A judge might or might not be environmentally knowledgeable or sympathetic, but all judges understand procedure. If the law requires a certain document to be prepared as a condition precedent of taking an action and the document (EIS or EA) was not prepared, a judge could comfortably conclude that the action could not take place, enjoining it until the proper document was prepared. Similarly, if a document was prepared but was inadequate (such as omitting a conspicuous environmental impact like air emissions from an industrial plant or noise from an airport) or the analysis failed fully to discuss the impact, the judge would, if persuaded, stop the project until the inadequacies were remedied.

An unfortunate byproduct of such reviews was that NEPA was seen as causing unneeded delay and excess paperwork as agencies strove to prepare complete documents. When President Jimmy Carter assumed office, he modified President Nixon's executive order, which had authorized non-mandatory guidelines, with a requirement for mandatory regulations. Those regulations were aimed at reducing excess delay and paperwork while placing greater emphasis on the bottom line—was the project or action environmentally beneficial, and if not, encouraging mitigation measures to reduce or eliminate the adverse impacts.

The success of the new regulations was due in part to CEQ's affirmatively reaching out to all affected segments of American society—business, environmental NGOs, and state governors. The stakeholders were heard, and they found their suggestions—if practical—were adopted or an explanation was given as to why they were not. At the conclusion of the process of adopting the regulations, representatives from each stakeholder group expressed their satisfaction in writing. As a result, these CEQ NEPA regulations<sup>8</sup> that were adopted in 1979 remain in effect today with only one amendment to one section.

#### B. State EIA Laws

About one-half of the states adopted EIA laws of varying breadth. Sometimes, both NEPA and an analogous state EIA law apply, in which case the usual practice is to combine the requirements of both laws into one document. While states have most EIA elements in common with the federal NEPA, there are some differences. For instance, the federal law has been held by the U.S. Supreme Court to be "procedural" as distinct from "substantive." This is to say, the procedures set out by NEPA must be followed and the full range of environmental impacts fully and impartially discussed, but at the end of the day the law has been held not to require that the environmentally preferable alter-

native or mitigation measures (which must be discussed) be actually adopted. In California, the California Environmental Quality Act (CEQA) imposes "substantive" requirements. Adverse environmental impacts must be avoided or at least minimized.

#### C. International EIA Guidance

In addition to the U.S. federal and state provisions, it is useful to look at some international norms. In the late 1990s, under the auspices of the United Nations Economic Commission for Europe, the Aarhus Convention was adopted, setting out widely accepted elements of EIA processes. The Convention has been ratified by 47 nations, not including China or the United States. Nevertheless, it provides a useful assembly of widely agreed-upon elements of an EIA. In 2010, the United Nations Environment Programme (UNEP) adopted its Bali Guidelines, which provide 26 guidelines aimed at improving the EIA process, with an emphasis on transparency and public participation.

More recently, the World Resources Institute (WRI) adopted the Environmental Democracy Index (EDI), which provides a series of indicators and guidance notes based on the Bali Guidelines, to facilitate evaluation of a given country's compliance with those standards. While neither the Bali Guidelines nor EDI is legally binding, they provide useful means of measuring many elements of a nation's EIA legislation and processes with special emphasis on access to information, public participation, and access to justice. We will refer to these guidelines in the discussion that follows.

#### D. The EIA Process

To return to the U.S. EIA process, NEPA requires a full EIS whenever there may exist a "major federal action significantly affecting the quality of the human environment." About 450 EISs are prepared in a typical year. EAs are required when there exist unresolved conflicts concerning alternative uses for the available resources. Practically, that means when the agency needs to determine whether to prepare an EIS or when an EA will aid the agency's compliance with NEPA, an EA will be prepared. About 45,000 EAs are prepared during a typical year. While as discussed above, NEPA is said to be procedural and not substantive, often a project proponent will agree during the EA process to mitigation that will keep the environmental impacts below the level of significance requiring an EIS, so one is not prepared. That agreement, called a mitigated finding of no significant impact (FONSI), is an enforceable document and therefore goes beyond procedure to have a substantive effect.

What then is the goal of an EIS (or an EA)? The basic purpose, of course, is to identify, make public, and avoid unwanted adverse environmental impacts—to "look before you leap environmentally." First comes the disclosure; then public and other agency input in the form of comments;

and finally a decision based on what has been learned and that, hopefully, avoids or minimizes the adverse impacts.

Chronologically, a project proponent (whether an agency or a private entity) develops a proposal. The agency whose proposal it is, or that is authorized to permit or fund the proposal, either prepares an EA or moves directly to an EIS. If the latter (and sometimes with the former), the agency begins a "scoping" process of consulting and inviting public comment on what should be studied in the EIS. The agency then prepares and circulates for public and other agencies' comment a draft EIS. Typically, at least 45 days are allowed for public comment. The agency then incorporates what it has learned from other agencies and from the public and prepares a final EIS, which must be circulated for an additional 30 days before a decision is made.

The final EIS must—subject to potential judicial review—respond to each public comment, whether individually or, in the case of near-identical comments, collectively. This is a measure vital to ensure that comments are taken seriously. A draft EIS found by a court to be so deficient as to preclude meaningful public review and comment may be sent back to the agency for revision and recirculation as a revised draft. Once the final EIS has been made available for the required 30 days, the agency may make its decision in a document called a record of decision (ROD). That ROD has to state what the agency has decided as a result of the EIS process, including what alternative has been selected, what mitigation has been adopted to avoid or minimize adverse impacts, and what monitoring is to be in place to ensure the mitigation is carried out.

After there is "final agency action" (such as an ROD or mitigated FONSI), an affected person or entity may bring a lawsuit to challenge the action taken. NEPA has no statute of limitations creating a period within which a lawsuit must be commenced, although statutes particular to certain agencies may impose such a limit (such as 180 days to challenge a transportation project). California, by way of contrast, imposes a universal 30-day limit for filing a CEQA lawsuit.

#### E. Elements of an EIA

What then goes into an EIS (or EA)? The three most basic elements are the following:

- (1) The "affected environment," describing the environmental setting before the proposal is undertaken—the environment that will be impacted;
- (2) The environmental consequences or impact if the proposal (including alternatives to it) is implemented;
- (3) Alternatives—a concept basic to NEPA, which may run the gamut from alternative means of achieving a proponent's goal (such as wind or solar as alternatives to coal or oil), to modest variations (such as changes in routing for a highway or a pipeline or transmission line), to the alternative of "no project"—when the benefits of a proposal are out-

weighed by the environmental degradation it would cause. The NEPA regulations describe the alternatives analysis as "the heart" of an EIA. Closely related to—and often overlapping with—the discussion of alternatives is the concept of mitigation, whereby a proposal may go forward, but with mitigation measures attached that would avoid or minimize adverse impacts.

Of these three elements, the second and third—environmental consequences and alternatives—are the most critical. The first, the affected environment, is a necessary predicate for the subsequent analysis, but it also can be abused—it is far easier to describe the existing environment, with elements such as "dandelion counts," than to do the hard analysis required to make an EIS useful. The bulk occasioned by excessive descriptions of environmental settings was responsible for much of the excessive paperwork in NEPA's early years, which the regulations were designed to eliminate.

## F. Characteristics of Effective NEPA Implementation

What, then, are the elements of the EIA process that have characterized U.S. NEPA implementation (as well as the analogous state EIA laws)? As briefly discussed above, the related concepts of alternatives and mitigation are considered essential to making the EIA process effective. After all, an EIA process that merely identifies adverse impacts without doing something to ameliorate them is almost useless. Mere disclosure is helpful, but what the Supreme Court has described as "action-forcing" measures actually to avoid or reduce adverse impacts are what is really meaningful. EIA improves the proposal that occasioned it.

#### I. Alternatives and Mitigation

Both the analysis of alternatives and the adoption of mitigation measures achieve the end of actual environmental improvement. The examination of alternatives allows consideration of other means of achieving a goal—for example, a better route for a pipeline or less-polluting means of generating electricity. Sometimes, the EIA process will end up focusing on the "no action" alternative—at the end of the process, all the means of achieving a given end are seen to have adverse consequences that exceed the benefits.

Mitigation serves a similar end. A proposal is allowed to go forward, but some or all of the adverse impacts are removed or reduced by the adoption of mitigation measures as conditions of project approval.

The federal NEPA and California's CEQA require analysis of both alternatives and mitigation, but in the actual implementation of the two EIA laws, the former has come to place greater emphasis on alternatives, while the latter has placed emphasis on mitigation. (As noted above, the California law, being substantive, requires the mitigation of all significant adverse impacts, while the

federal law requires discussion of mitigation but does not require its adoption.)

## 2. Scope

A basic issue in any EIA process is the scope of the analysis—making sure that all environmental impacts are in fact considered. That includes ensuring that all environmental media are covered. No impact may be summarily excluded. For instance, if an industrial plant or the expansion of a port has a significant impact on its air emissions, an EIA process would be incomplete if it excluded air from the impacts. Similarly, for a highway through a forest inhabited by species the government has found to be endangered, an EIA process would have to include the highway's impacts on endangered species.

#### 3. Indirect and Cumulative Impacts

Indirect as well as direct impacts must be considered within the scope of an EIA process. For instance, if a highway is to be built through a sparsely populated area, there may well be several levels of impact. First, there are the direct effects stemming from the actual construction of the highway itself—such as the noise, dust, and other air emissions caused by building the road. But there may well be indirect impacts as well. The vehicles that will use the highway once built will cause both air and noise emissions. An area previously undeveloped may be opened for development. That may or may not be a good thing. Indeed, it may be the very purpose for which the highway is being built. But, in any case, such development will have impacts that need to be set out in order to have informed decisionmaking. No less important is the consideration of "cumulative impacts"—impacts that may be individually minor but cumulatively significant.

# 4. Independent External Review of the EIA

There must be means of impartial outside comments upon and ultimately validation (or invalidation) of an agency's compliance with the applicable EIA laws. In the United States, that takes two forms:

- (1) By statute, the U.S. Environmental Protection Agency (EPA) must comment on and rate the adequacy of each agency's EIS. In extreme situations, provisions exist for EPA to refer the matter to CEQ in the president's executive office. NEPA itself requires the agency preparing an EIS to obtain the comments of agencies that have jurisdiction by law or special expertise. Typically, that means that agencies with responsibilities for fish and wildlife, parks, the environment, and oceans will be asked to comment on the preparing agency's EIS.
- (2) As discussed earlier, judicial review by federal judges (or in the case of state EIAs, by state judges)

helps ensure that the EIA law is faithfully followed, provides an outside independent evaluation of the adequacy of the EIA process, and—in part due to the mere fact of potential judicial review (which in fact takes place in only a minor portion of proposals)—provides an impetus to agencies to comply fully with the EIA law. While judicial review is the accepted means in the United States of outside scrutiny of an EIA process, other nations have used such means as panels of independent experts to perform an analogous role.

#### 5. Public Participation

Public input is critical to the EIS process. Internationally, two of the three pillars of the UNEP Bali Guidelines and WRI's EDI deal with the role of the public, including access to information and public participation. Again, very useful guidance is to be found in these documents. In the United States, NEPA provides for public access to EIA documents and also provides at least three occasions for public input—at the scoping stage, comments on the draft EIS, and comments on the final EIS. This combination of transparency and agency responsiveness to public input serves multiple purposes:

- It provides the affected public with information on what the agency proposes to do that will impact the public.
- It provides the public with the opportunity to comment on the proposal and its impacts.
- It requires the agency to respond to public concerns—either modifying the proposal to reflect the public comments or explaining why it cannot or will not do so.
- At best, the public can contribute to better decisions. By way of example, the U.S. author was once involved in an EIS process covering an international natural gas pipeline from Canada to the United States. There were many controversies over portions of the proposed route. In one particularly contentious area, a private citizen proposed an alternative route that she persuaded the agency was superior environmentally to that originally proposed. Her alternative was subsequently adopted and is now part of the actual operating pipeline.
- To the extent that the public accurately perceives the EIA process as a legitimate means for the expression of outside views and to the extent the agency is seen as responsive to public input, societal stability is enhanced. With a recognized and trusted avenue for public input, which may include criticism coupled with governmental responsiveness, other less peaceful means of expressing public concern are avoided. But the EIA process must be seen to work.

#### 6. Other Requirements of NEPA

Other requirements have also characterized implementation of EIA in the United States. These include:

- Setting out the "purpose and need" for the proposal being analyzed in the EIS. This focuses officials' (and members of the public's) minds on the goal to be achieved and helps in delineating the range of alternatives to be studied.
- Providing in the NEPA regulations that time limits on the EIS process must be established when requested by an applicant for approval. This provision—much desired by the business community—has been surprisingly underused. In the U.S. author's opinion, the provision deserves greater emphasis and use.
- Resolving issues when multiple agencies may have jurisdiction over a given proposal. For instance, if a highway is to be built on public lands and includes a bridge over navigable waters, multiple agencies may be argued to be the appropriate "lead" agency. Mechanisms exist for resolving such disputes.
- Addressing conflicts of interest. In the case of applicants to the federal government, the responsibility for preparing the EIS lies with the governmental agency or with an outside consultant the agency has selected. Measures are in place to minimize the potential conflicts of interest inherent in the situation of an EIS preparer having an interest—such as financial—in the outcome of the EIS process. Such conflicts are forbidden. For instance, payment for preparation of an EIS cannot be made contingent on approval of the project.
- Encouraging cooperation between agencies. Early in NEPA's history, some agencies would withhold participation in another agency's EIA process until the comment stage, sometimes forcing the redrafting of a document and causing unnecessary delay. The CEQ NEPA regulations, adopted in 1979, attempted to resolve this problem by encouraging agencies to be "cooperating agencies" that work with the lead agency early in the process, thereby enabling meaningful input and reducing the potential for delay.
- Encouraging in NEPA regulations the interdisciplinary preparation of EIA documents and attempting to ensure the integrity of the scientific methodology.
- Preparing NEPA documents using plain (i.e., non-technical) language understandable by members of the public. Sometimes, that requires interpretation. For instance, much of the population in the southwestern part of the United States is of Hispanic descent, and the largest single segment of San Francisco's population is of Chinese origin. Adequate EIA documents in those areas may need to be available in Spanish or Chinese, respectively.

- Preparing a "program EIS." Sometimes there are multiple individual projects that lend themselves to a comprehensive analysis in a program EIS. Once such a document has been prepared, a subsequent project-specific EIS can, by a process called "tiering," incorporate the general impact analyses from the program EIS and concentrate on impacts particular to the site-specific project. For instance, a program EIS on wind generation in a large region might discuss the impacts of wind power generally and such pervasive issues as mortality from bird strikes, while a subsequent site-specific EIS would focus on the impacts of the particular project on a specific site.
- Addressing a specific but recurrent problem that
  deals with what to do when information on impacts
  is lacking (and cannot readily be provided) or the science is uncertain. The regulations seek to balance the
  need for an analysis and a decision with the reality
  of uncertainty, while insisting that the fact of uncertainty be made clear.
- Completing the EIA process. While it may be obvious, it is absolutely vital to prevent a decision from being made before the EIA process is complete. To do otherwise is to render the entire EIA process superfluous and meaningless. Judicial review helps block attempts to proceed prior to completion of the NEPA process, but the more subtle situation of decisionmakers having made up their minds in advance of completion of the EIA process is more difficult to deal with. Sometimes the administrative record that forms the basis for judicial review, which consists of all documents that were before the decisionmaker when he or she made the decision (including e-mail exchanges within the agency as well as more formal documents), can provide a reviewable record to examine whether there was—or was not—a decision reached before completion of the NEPA process.
- Addressing specific concerns. There are, of course, specific provisions in the CEQ NEPA regulations covering such issues as what to do in an emergency and how to protect EIA documentation in situations involving secrecy, such as national security.
- Implementing procedures for each agency. While the CEQ NEPA regulations apply governmentwide, each agency also has its own implementing procedures, prepared subject to CEQ review and approval.
- Using the categorical exclusion. While we have discussed such standard EIA documentation under NEPA as EIS and EAs, there also exists a third element of compliance—the categorical exclusion. Essentially, each agency in its implementing procedures can provide for activities that neither individually nor cumulatively could have significant environmental impacts. These are said to be categorically excluded from further NEPA compliance. An example might be person-

- nel actions—important, but not the sort of impact contemplated by the drafters of NEPA.
- Completing supplemental EIS documents. Sometimes circumstances change, new and significant information comes to light, or the proposal itself is altered. The U.S. regulations provide for a supplemental EIS to analyze the new developments.
- Examining climate impacts. In light of global attention to climate change, as epitomized in the recent Paris Conference of the Parties, and in which both China and the United States play conspicuous roles, the examination of climate impacts can be an important element in some EIA analyses.<sup>9</sup>
- Analyzing economic and social impacts. The U.S. requirements with respect to the inclusion of economic and social impacts provide that such impacts must be analyzed in any EIS prepared to address more traditional environmental factors.
- Utilizing "adaptive management." In recent years, adaptive management has been seen as a useful tool in EIA preparation. Essentially, such an approach provides flexibility so that mitigation may be adopted subject to and contingent upon factual developments with respect to environmental impacts as they emerge over time.
- Assigning responsibility for costs. When a private application occasions preparation of an EIA document, issues arise as to who is responsible for the actual preparation and who pays for it. In the United States, there are restrictions on who prepares an EIS (the agency must prepare or select the preparer to preclude conflicts of interest), but any EA may be privately prepared subject to strict agency oversight. In all cases, the cost of the preparation can be placed on the applicant.

# III. Challenges to EIA in China

#### A. Imperfection of the Planning EIA

The Regulation on Planning Environmental Impact Assessment was promulgated by the State Council in 2009 with an intention of providing details on how to implement the planning EIA. However, legislation of the planning EIA needs to be improved at least in the following aspects:

The definitions of several important terms are ambiguous, like "the authority that draws up the plan,"

- "ad hoc plan," "significant adverse environmental impact," etc., which creates uncertainty in the scope of the application of the laws and regulations.
- The subject of the planning EIA is insufficient. As regulated in Article 2 of the Regulation, comprehensive plans and ad hoc plans are applied to the planning EIA. But the Regulation does not specify whether the "policies" should apply to the planning EIA process or not. In fact, many important policies have produced significant impacts on the environment, such as industry-supporting policies.
- The follow-up assessment of planning EIAs is insufficient. There are general rules on the follow-up assessment of planning EIAs in the Regulation, but the rules are too vague to be enforced. The Regulation does not specify when and how to carry out the follow-up assessment. Moreover, the legal liabilities for violating the rules of the follow-up assessment are not clear.
- The EIA practice in China would benefit from a greater emphasis on "indirect" as well as "direct" environmental impacts, a concept defined in the U.S. EIA regulations as impacts caused by the proposed action but later in time and removed in distance but still "reasonably foreseeable." By way of example, when a new port is constructed, there may be direct impacts stemming from the construction and perhaps dredging of the harbor, but the indirect impacts occasioned by emissions from the ships calling at the port and the trucks and trains delivering goods to and from the port may be of greater longrange environmental significance than the short-term direct impacts.

#### B. Relatively High Rate of Violation

On January 18, 2005, the MEP suspended 30 mega-scale construction projects in 13 provinces and municipalities for their failure to conduct EIAs as required by the EIA Law. The 2005 "Storm of Environmental Protection," an environmental compliance inspection raid carried out by SAEP, had revealed the common practice of many construction entities that started construction and then later made up EIA documents if caught by the environmental authority, while continuing with construction. More than 10 years later, the rate of EIA violations remains high, especially in western China. Even in Jiangsu Province, which is a prosperous province with better EIA compliance, the EIA implementation rate is only 50%.<sup>10</sup>

The high rate of violation of EIA could be attributed to the following conditions. First, the traditional concept of "economic development first" still strongly affects decisionmaking. As a matter of fact, local officials are mainly

See CEQ, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews (Aug. 1, 2016), https://www.whitehouse.gov/sites/whitehouse.gov/files/documents/nepa\_final\_ghg\_guidance.pdf; see also Nicholas C. Yost, NEPA and Climate Change: Practitioners Should Take Note of CEQ's New Guidance, 45 ELR 10646 (July 2015).

<sup>10.</sup> Liu Weisheng, Environmental Impact Assessment: Puzzle in Economical Development, in Envil. Econ. 16 (2005).

assessed by the increase in economic gross domestic product (GDP) of the regions in their administration; as a result, the local governments pay a great deal of attention to economic development while sacrificing the environment. Meanwhile, local EPBs have to "keep the same tune" as local governments due to Chinese political mechanisms, in that the operations of local EPBs are largely subject to financial allocation from the local governments. In the case of EIA, the problem is that the departments in charge of EIA in the EPBs find it difficult to make an independent decision without taking into account the local GDP growth factor.

In addition, both the cost for violating the law and its deterrent force are relatively low. According to the EIA Law, "supplementary EIAs" are allowed when the construction work starts without EIA approval. In such a case, a local EPB, which has approval authority over the construction project, can only instruct the entity to stop construction and to carry out supplementary EIAs within a limited period of time. If the supplementary EIAs cannot be conducted before the deadline, a fine of only 50,000 to 200,000 Renminbi can be imposed.<sup>11</sup> Such penalties are too weak to deter polluters from breaking the law. However, thanks to the amendments in the New EIA Law, EPBs at and above the county level are authorized to impose a fine ranging from 1% to 5% of the total investment of the construction project if the construction work starts without EIA approval, which substantially increases the cost of violating the law. In addition to stopping construction, local EPBs are empowered to order the violators to restore the status quo ante.

It is worth mentioning that the enforcement of an EIA differs between China and the United States. China has given the MEP powers to halt projects for failure to observe EIA requirements, which is a capability that may be found desirable by MEP's counterpart in the United States, EPA. The United States, by way of contrast, relies on judicial review to enforce its EIA laws. While the administrative (MEP) approach has the merit of definitiveness, the U.S. system of relying on the courts through lawsuits brought by members of the public has resulted in more comprehensive observance of the EIA requirements. Agencies that prepare EIAs generally do their best to meet EIA requirements to avoid litigation, or, if a lawsuit is brought, to have been so thorough in assessing the environmental impacts as to be confident of the EIA being upheld in court. The system of judicial review, while not systematic, has resulted in the EIA process becoming highly successful in actual practice.

#### C. Deficiency in EIA Quality

To fulfill the EIA purpose of pollution prevention and control, the quality of the EIA process and documents must be ensured. The EIA Law (including the New EIA Law) imposes quality control on EIA institutions that produce

both EIA reports and EIA reporting forms. EIA institutions obtain their qualification certificates from MEP based on review and examination, and they may only provide EIA services according to the grade designated and scope of service mandated by the certificates.<sup>12</sup> However, despite the legislative and administrative provisions on quality control, the substandard quality of EIA documents remains an issue in practice.

Consideration of alternatives is fundamental in the EIA process, as it encourages more open decisionmaking and the early incorporation of environmental concerns into project designs. The alternative usually involves variation in one or more of the following: location, scale of the project, processes and technology, site layout, operating criteria, and mitigation measures. There is also the fundamental alternative of not going ahead with the project: the "no-action option." <sup>13</sup> However, the importance of considering alternatives is not well-valued in China. There are no legal provisions for considering alternatives either during an EIA or as an alternative analysis on the EIA report. Therefore, in most EIA documents, the alternatives consideration is often much worse than the original proposal, which serves to prove the reasonableness of the original proposal. This is also evidenced by the fact that the passing rate of EIAs is very high.

Ironically, both the notorious PX project in Xiamen and the waste power generation project in Beijing, which were suspended by the MEP in 2007, had successfully obtained approval by the environmental protection authorities. Besides a failure to consider sound alternatives, substandard EIA institutions also have a negative effect on EIA quality.

The EIA Law requires that project owners entrust qualified EIA institutions to complete EIA documents. But in practice, many EIA institutions are entrusted based on the "contingent fee," i.e., only if the EIA obtains approval by the authority will the EIA institutions receive all the EIA fees. In such a case, the EIA institutions would endeavor to make the EIA documents approvable, including fabricating data or concealing facts to justify the proposal. In addition, there are EIA institutions that are affiliated with the MEP and local environmental protection authorities in the EIA market, which have been criticized for having an unfair advantage and being prone to corruption.

The failure to consider all impacts, including cumulative impacts, in the EIA process also causes an uncertain quality of EIA. Often impacts of a particular project may be individually minor, but when those impacts are combined with similar impacts from multiple sources and projects, it can be a cumulatively significant impact for the analysis, which would be useful information to decisionmakers and the public. Such cumulative impacts are defined in the U.S. CEQ NEPA regulations as the impact of a proposed action when added to other past, present, and reasonably foreseeable future actions.

<sup>12.</sup> Id.; Article 19 of the EIA Law.

<sup>13.</sup> Wang et al., *supra* note 2, at 543-79.

#### D. Deficiency in Public Participation

There is a widespread consensus in EIA theory that the involvement of potentially affected parties is a core principle of a sound impact assessment. Therefore, public consultation and participation are integral to an EIA, producing significant benefits for both project entities and affected communities. An EIA cannot fully achieve its goal of evaluating the environmental impact of a project without taking into account the people who are most likely to be affected by the proposed project. However, effective public involvement is largely missing from the current EIA system in China, both in terms of statutory support and in practice.

If a special plan may unfavorably impact the environment or indirectly involve the environmental interests of the general public, or a construction project may produce significant adverse environmental impacts, the department that draws up the special plan or the project owner is required to seek comments from relevant entities, experts, and the general public.14 The decisions on adopting or rejecting any public comments need to be explained and attached to the EIA report submitted for approval.15 The EIA Law does not oblige an institution completing an EIA reporting form or EIA registration form to inform or consult with the public. But the local EPBs may request that the project entities carry out public consultation if the projects are located in residential areas and produce nuisances that directly interfere with the community.<sup>16</sup> However, there is a rather narrow form of public involvement and there are no further legal provisions for public participation in the EIA procedure. In particular, there is no statutory requirement for a full EIA report to be made available to the public.

The MEP promulgated the *Provisional Measures on Public Participation in Environmental Impact Assessment* in 2006, aiming to promote process transparency and ensure public access to information by imposing an obligation to disclose information on project entities, EIA institutions, and environmental protection authorities.

Generally, effective participation relies on the degree of information disclosure and the level of consultation. While noticeable progress has been made to enhance public participation in the EIA process, the public still finds it extremely difficult to provide meaningful contributions without adequate and accurate project information. An opportunity to comment does not necessarily lead to meaningful public input.

Actually, the effectiveness of EIA relies on an exchange of information between government, industry, environmentalists, and the public. More effort needs to be made to increase this exchange of information to increase the successfulness of the EIA. There are, of course, many aspects

of the "public," while China has placed an emphasis on those members of the public directly affected by a proposed action. The U.S. experience reflects the benefit of input from NGOs, some of which contribute a broader public vision and may provide scientific and technical input that is useful to the government and its decisionmaking—the organized public assisting the government.

#### IV. The Trend of EIA in China

As mentioned above, the New EIA Law was promulgated in July 2016, which has changed the existing EIA regime in China. In addition, a series of institutional documents have been promulgated to improve the EIA system in recent years, including: (1) legislation for developing the planning EIA system, such as Opinions on Strengthening the Linkage Between Planning Environmental Impact Assessment and Construction Project Environmental Impact Assessment (Planning EIA and Project EIA Opinions) and Guiding Opinions on Strengthening Space Control, Pollutant Cap Control, and Environmental Access by Plan Environmental Impact Assessment (Trial) (Planning EIA Guiding Opinion); (2) solutions in response to the existing problems in the EIAs of construction projects, like Administrative Measures for the Environmental Impact Post-Assessment of Construction Projects and Circular on Further Strengthening the Accountability of Illegal Environmental Impact Assessment Project; and (3) measures to enhance public participation, like the Scheme for the Information Disclosure Mechanism for the Environmental Impact Assessment of Construction Projects.

Pan Yue, deputy minister of the MEP, pointed out that these institutional documents are to be used to implement the requirements of the *Opinions on Accelerating the Development of Ecological Civilization* and the *General Proposal for the Reform of the Ecological Civilization Regime*.

Moreover, the minister of the MEP, Chen Jining, claimed to have implemented the most strict environmental protection system in order to improve environmental quality and to reform the environmental management system.<sup>17</sup> As the first stage in environmental protection management, the EIA regime needs to be reformed first. Consequently, the MEP promulgated the aforementioned measures to provide an institutional guarantee of the expanded implementation of EIA.

#### A. Promote the Implementation of the Planning EIA

According to Pan Yue, the top priority of these arrangements is to promote the implementation of the planning EIA.<sup>18</sup> Management of strategic risk is integral to modern management, which aims to avoid risks in strategic decisionmaking and implementation by prior control, real-

<sup>14.</sup> Articles 11 and 21 of the EIA Law.

<sup>15.</sup> *Id*.

See Reply on the Issue of Implementation of Public Consultation in the Environmental Impact Assessment of Construction Projects (promulgated by the MEP, 2002).

Department of Environmental Protection to Improve the EIA System Innovation to Strengthen the Whole Process of Supervision to Promote Green Development, CHINA ENV'T NEWS, Feb. 26, 2016, http://www.zgg.org.cn/bwdj\_5137/gbwjgdwzzq/qgrdcwjg\_9467/zfzz/201602/t20160226\_568190.html.

<sup>18.</sup> *Id*.

time control, and subsequent control. The strategic EA and the planning EIA are effective measures to implement the management of strategic risk in the field of environmental protection. Chen Jining has emphasized that pollution prevention is the first priority of environmental protection, which requires a planning EIA to be incorporated in the early stage of decisionmaking. Without the inclusion of the planning EIA in government's macro decision, environmental degradation would be inevitable.

In the past practice of the EIA Law, the conclusion of the EIR and its review comments have rarely been adopted in the preparation of a special plan, which has undercut the effectiveness of the planning EIA. To improve this, the New EIA Law stipulates that the authority drafting the special plan shall consider the conclusion of an EIR and its review comments as important grounds for deciding whether or not to approve the draft special plan. If the conclusion of the EIR is not adopted by the approval authority, an explanation should be made. And with respect to specific construction projects contained in the special plan, the conclusion of the EIR of the special plan shall be an important consideration for the project EIA.

In respect to the internal working mechanism, the MEP promulgated the *Planning EIA Guiding Opinions* (Opinions) on February 24, 2016. This document set out deployments for strengthening space control, pollutant cap control, and environmental access in a planning EIA. Specifically, the Opinions stipulate that, in carrying out a planning EIA, we shall, in combination with regional characteristics and from the perspective of maintaining the integrity of an ecosystem, identify and determine the ecological spaces requiring strict protection; these spaces shall be established as the bottom line for regional development, to optimize the overall arrangement of the related production and residential spaces and to strengthen the control of the development boundary.

In addition, the MEP promulgated the *Planning EIA* and *Project EIA Opinions* on December 30, 2015, to enhance the hard rules of the planning EIA and to link the internal working mechanism. As supporting policy, the *Pilot Program for Linkage Between "Management by List"* of *Planning Environmental Impact Assessment in Industrial Parks and Project Environmental Impact Assessment*, which was promulgated on the same day as the Opinions mentioned above, purports to strengthen the macro-control of the planning EIA and promote the institutional reform of supervision and approval for construction projects in industrial parks.

#### B. Strengthen Real-Time Control of the Project EIA

To strengthen the real-time control of project EIA during and after the process, the MEP promulgated the *Administrative Measures for Interim and Ex Post Supervision in Environmental Protection of Construction Projects (Trial)* on December 10, 2015, which is the first regulatory document promulgated by the MEP to strengthen interim and

ex post supervision. It specifies the regulatory responsibilities of the environmental protection authorities at different levels and increases the liabilities of construction entities. Further, it clarifies the contents, procedures, and methods for interim and ex post supervision, providing the institutional basis for an interim and ex post supervision system.

On the same day, the MEP also promulgated the *Administrative Measures for the Environmental Impact Post-Assessment of Construction Projects*, which requires mega-, complex, and sensitive projects to conduct additional assessments of real environmental impacts and the effectiveness of their environmental protection measures after operating for a period of time. The construction entities failing to meet the requirements of the post-assessment shall take measures to mitigate environmental impacts.

Penalizing violations is an important guarantee for ex post control. To establish an adequate liability system, the MEP is working on Measures for Implementing the Imposition of Accountability for Planning Environmental Impact Assessment, which would impose responsibility on the relevant party and government leaders in a situation in which the planning EIA is not carried out as requested. Meanwhile, the Circular on Further Strengthening the Imposition of Accountability on Construction Projects Violating Environmental Impact Assessment Law, which was promulgated on December 10, 2015, reaffirms that the environmental protection authorities shall impose administrative penalties on construction projects violating relevant EIA regulations strictly according to the laws and regulations. For the governmental authorities, state-owned enterprises, and public institutions whose conduct constitutes a serious violation of the EIA Law as construction entities, relevant personnel shall be dispatched to discipline the inspection and supervision authorities, which does not include criminal liability.

In addition, the supplemental EIA is no longer accepted under the Environmental Protection Law (EPL) revised in 2014. According to Article 61 of the EPL 2014, the authorities responsible for supervision and administration of environmental protection, which is not limited to local EPBs, shall order the violating party to stop construction, impose a fine, or order the party to make restitution. Regarding the inconsistencies between the 2014 EPL and the 2003 EIA Law concerning the penalty for illegal construction projects, the MEP issued the Reply of Relevant Issues of Article 61 of Environmental Protection Law (revised in 2014), which clarifies that Article 61 of the 2014 EPL Law shall take precedence over the 2003 EIA Law. The New EIA Law reiterates that supplementary EIAs will no longer be accepted and the penalty for construction without EIA approval will be based on the total investment of the project, which follows the requirement in the New EIA Law.

#### C. Potential Reform of EIA Institutions

The EIA institutions are also at the heart of the reform. The MEP promulgated the Work Plan for Disaffiliating the EIA Institutions From National Environmental Protection System

on March 20, 2015, which is a big step forward to rectify and standardize the market of EIA institutions. By the end of 2015, there were 140 EIA institutions disaffiliated from relevant environmental protection authorities. More than 200 EIA institutions will have completed disaffiliation in 2016. In addition, the *Measures for the Administration of the Qualification for Environmental Impact Assessment of Construction Projects* will potentially be revised to incorporate strict accountability for both EIA institutions and the personnel thereof.

Almost all EIA institutions opt to run their businesses in the form of limited liability companies in compliance with the *PRC Company Law*. Nevertheless, the nature of limited liability is a double-edged sword, in that the professionalism of individual experts cannot be maximally incentivized by a corporate governance mechanism. Following the pace of disaffiliation, there is the potential that EIA institutions will establish partnerships instead of corporations. In early September 2016, the MEP made an unprecedented official response to a proposal by a Chinese environmental NGO recommending the introduction of partnership to EIA institutions and agreed to begin a feasibility study based on the proposal. This is a landmark implying that the Chinese government may apply complete market incentives to EIA institutions.

#### D. Enhance Accessibility to Information by the Public

Public participation is meaningful only if EIA documents are accessible by the public at each stage of the EIA process, including at the scoping stage and upon completion of the EIA report. To enhance public participation, the MEP

promulgated the Scheme for the Information Disclosure Mechanism for the Environmental Impact Assessment of Construction Projects (Scheme) on December 10, 2015, which specifies principles of information disclosure for a project EIA, such as subject, contents, and procedures. Again, the Scheme is at most a ministerial regulation, the implementation of which may need support by high-level legislation.

#### V. Conclusion

With a series of proactive actions (mainly ministerial regulations) taken by the MEP, 2015-16 can be considered a milestone in the development of the EIA process in China. Through the enforcement of the New EIA Law, EIA will remain important in the course of project development, with a slight shift in focus. It is foreseeable that the planning EIA will result in some changes to the administration of environmental protection, and the existing problems in the project EIA will be mitigated by the new policies.

However, most provisions of the Chinese regulations and documents are too general to be enforced, and should be further consolidated by additional rulemaking. With some key changes in the New EIA Law and the promulgation of a series of regulations by the MEP, the significance of an EIA has been somewhat weakened for the purpose of strengthening supervision in the course of project development after the EIA. It is the authors' hope that both China and the United States will continue to learn and to benefit from each other's experience with EIA as well as from international norms and best practices such as those proffered by UNEP.