Institutional Roles of Political Processes, Expert Governance, and Judicial Review in Environmental Impact Assessment: A Theoretical Framework and a Case Study of Taiwan

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ABSTRACT

Environmental impact assessment (EIA) is used by most countries and is widely recognized as an important instrument for infusing sustainable development considerations into governmental decision-making. However, studies show that EIA often falls short of that goal. This article explores the design and operation of EIA through the lens of comparative institutional analysis. It examines the pros and cons of various governmental institutions charged with implementing EIA, uses a case study of Taiwan to demonstrate the validity of this analytical framework, and provides suggestions for future practices and legal reforms.

This article proposes that the core problem that EIA is meant to address is minoritarian bias—the highly disproportionate representation of the interests of developmental interest groups in political processes, as opposed to the interests of the general public and future generations. To adequately counteract this political malfunction, this article argues for improvements to EIA systems that enhance public participation, reinforce expert governance, and heighten judicial scrutiny. Among these, the judiciary plays the most profound institutional role. Where minoritarian bias is prominent in EIA proceedings, courts should strictly review, rather than submissively defer to, EIA judgments and developmental decisions.

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INTRODUCTION

Environmental impact assessment (EIA) has constituted an elemental part of environmental law in many countries.¹ The first EIA process was instituted in the United States with the 1969 enactment of the National Environmental Policy Act (NEPA).² NEPA declared a broad goal of achieving harmony between humankind and nature and between present and future generations.³ To pursue this ambitious goal, NEPA utilized a creative strategy—requiring agencies to consider the potential environmental effects of their proposed actions—and therein gave birth to EIA.⁴ The idea of EIA soon spread globally. Over the decades, at least 120 countries have adopted EIA systems.⁵ The worldwide acceptance of EIA systems makes it fair to say that EIA is one of the most influential policy innovations of the twentieth century.⁶

However, the broad goals of EIA are not always met when an EIA system is implemented. Although commentators agree that EIA leads to enhanced consideration of environmental factors, in practice it is still far from achieving ideal outcomes in terms of sustainability.⁷ Several empirical studies regarding the effectiveness of EIA in different countries shows that the influence of EIA on development decisions is only moderate, rather than substantial, and that generally the project modifications resulting from EIA are relatively minor.⁸ When it comes to the goal of sustainability, EIA appears even less successful. In one study, only 19 percent of the respondents (mainly environmental assessment practitioners, researchers, and other specialists in North America, Western Europe, and Australia) believed environmental assessment “always or often” ensured that any given development project was sustainable, while 40 percent believed that was “seldom or never” the case, and 39 percent

⁴. Id.
⁵. Glasson et al., supra note 2, at 36.
⁶. Glasson et al., supra note 2, at 36.
⁸. Cashmore et al., supra note 6, at 299–302.
believed EIA only “sometimes” met that goal. This shows that EIA is considered rather inefficient at ensuring the sustainability of development.

The best way to understand why EIA often falls short of its goals is by applying comparative institutional analysis, which studies the advantages and disadvantages of different institutional systems when it comes to decision-making. This is because the effectiveness of a system depends not only on an institution’s legal mandates but also on institutional factors. For example, one of the institutional factors underlying EIA’s core requirement that agencies take environmental considerations into account in decision-making is the recognition that traditional political processes tend to overlook those environmental considerations. Other factors include the institutional roles of public participation and expert governance, both of which are usually elements of EIA systems, and both of which respond to the failure of political processes. This approach also leads to a clear conclusion for how the judiciary should review EIA decisions.

This article will analyze the design and effectiveness of EIA from this comparative institutional perspective. More specifically, this article intends to reveal the sufficiency and shortcomings of various governmental institutions surrounding EIA in its pursuit of sustainable development, and provides suggestions for future practices and legal reforms. This article argues that because of the prominent failure of political processes to protect environmental concerns, an EIA system demands enhanced public participation, reinforced expert governance, and heightened judicial scrutiny. Furthermore, since agencies may undermine the implementation of public participation and expert governance through procedural or technical maneuvers, the judiciary is the best-placed institutional player to counteract the political malfunction likely to occur in EIA systems.

The discussion is presented in four parts. Part I provides background information regarding EIA to lay the groundwork for the following analysis. It shows that EIA has taken various forms in different countries, while still pursuing the common goal of sustainable development. Part II conducts the comparative institutional analysis, exploring the inadequacies of political processes in the environmental context, as well as the institutional functions of public participation, expert governance, and judicial review in EIA systems. Part III then uses EIA practices in Taiwan as an example of the validity of the theoretical framework.

presented in Part II, and shows how the framework could help to understand the interactions of institutions in reality. This case study will demonstrate the prominence of political malfunction in EIA systems and how institutional factors may serve to counter this malfunction. Part IV makes several proposals to address the failure of political processes to ensure EIA is successful in achieving sustainable environmental outcomes. It suggests the most effective approach involves institutional responses that enhance public participation, expert governance, and judicial review of the EIA process.

I. OVERVIEW OF ENVIRONMENTAL IMPACT ASSESSMENT

A. Origin and Spread

EIA originated from the U.S. federal law, NEPA. NEPA requires federal agencies to prepare an environmental impact statement (EIS) for “major Federal actions significantly affecting the quality of the human environment”\textsuperscript{10} to address “(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.”\textsuperscript{11} Besides NEPA, which applies only to actions of the U.S. federal government, 15 U.S. states, the District of Columbia, and the territory of Puerto Rico have also enacted their own environmental policy acts.\textsuperscript{12} While these state-level acts, or “Little NEPAs,” are largely modeled after NEPA\textsuperscript{13}, they vary from NEPA and each other to some extent. For example, some Little NEPAs contain substantive mandates, while NEPA governs only procedural matters.\textsuperscript{14} Additionally, the threshold of when an EIS is required under some Little NEPAs is lower than the threshold under NEPA.\textsuperscript{15}

After the emergence of NEPA in the United States, the idea of EIA soon spread globally. During the 1970s, several countries, such as Canada, Australia, New Zealand, West Germany, France, and the Nether-
lands, began to incorporate EIA requirements into their legal regulations.\textsuperscript{16} The European Directive on EIA, approved in 1985, pushed more countries in Europe to enact EIA legislation in the late 1980s.\textsuperscript{17} The same period also witnessed the growth of EIA adoption in developing countries.\textsuperscript{18} Then, in the early and mid-1990s, EIA laws increasingly entered Africa, South America, and new countries that broke away from the Soviet Union.\textsuperscript{19} In Taiwan, after administrative trials that lasted several years, the Legislative Yuan—Taiwan’s legislative branch—passed the Environmental Impact Assessment Act (EIAA) in 1994. By 1996, over 100 counties had national EIA systems.\textsuperscript{20} By 2005, the number increased to at least 120,\textsuperscript{21} and today EIA exists in an overwhelming majority of countries in the world.

EIA is widespread not only on a domestic level but also on an international level.\textsuperscript{22} Because environmental effects are often not confined within a country’s boundaries, international EIA commitments are needed to address transborder impacts, impacts to areas of the global commons, and impacts that have global concerns such as biodiversity and climate change.\textsuperscript{23} EIA commitments have been included in numerous international documents, such as the Kuwait Convention for Cooperation on the Protection of the Marine Environment from Pollution, the United Nations Convention on the Law of the Sea, the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, the Convention on Environmental Impact Assessment in a Transboundary Context, and the Protocol to the Antarctic Treaty on Environmental Protection.\textsuperscript{24}

B. Variations in Design

Although all forms of EIA share the common objective that agencies must examine and evaluate the environmental impacts of a proposed project before making decisions, the specific designs in different countries vary widely. Because different designs may trigger different institutional effects, which are discussed in Part II, it is worth briefly describing the variations of EIA systems. The most substantial variations

\begin{thebibliography}{9}
\bibitem{16} Sadler, \textit{supra} note 9, at 25; Glasson \textit{et al.}, \textit{supra} note 2, at 36.
\bibitem{17} Sadler, \textit{supra} note 9, at 25; Glasson \textit{et al.}, \textit{supra} note 2, at 36.
\bibitem{18} Sadler, \textit{supra} note 9, at 27.
\bibitem{19} Glasson \textit{et al.}, \textit{supra} note 2, at 36.
\bibitem{20} Sadler, \textit{supra} note 9, at 25.
\bibitem{21} Glasson \textit{et al.}, \textit{supra} note 2, at 36.
\bibitem{22} Neil Craik, \textit{The International Law of Environmental Impact Assessment} 23 (2008).
\bibitem{23} \textit{Id.} at 4–5.
\bibitem{24} \textit{Id.} at 4, 90–108, 283–93.
\end{thebibliography}
are concerned with three questions: (1) Which agency is responsible for EIA implementation? (2) What form of organization does the responsible agency adopt? (3) Who or what is responsible for producing basic information regarding environmental impacts of the proposed development action?

The first question is which agency presides over EIA implementation. The U.S. law NEPA, the original form of EIA, places the responsibility of implementing EIA processes on each competent authority (the agency in charge of a proposed action). However, some countries have adopted different designs. Because NEPA does not separate an EIA process from an ordinary administrative decision-making process and hand it over to a specific agency, it can be said to have a decentralized design. By contrast, some countries have adopted a centralized design, in which the agency responsible for environmental affairs has the authority in EIA processes. Some countries further strengthen this independent oversight. For example, in Denmark, Italy, and Portugal, the agency governing environmental affairs must decide whether a project is environmentally compatible before competent authorities make the decision to proceed with the project. Taiwan is also an example of this type. Under Taiwan’s EIAA, when development projects fall within the jurisdiction of the central government, the Environmental Protection Administration (EPA) is the agency responsible for conducting EIA reviews; when development projects fall within the jurisdiction of city or county governments, those governments serve as the responsible agency. Before EIA-responsible agencies complete EIA reviews, other agencies are not allowed to issue development permits. Moreover, EIA-responsible agencies may conclude that a development should not be conducted. In that case, other agencies may not issue development permits.

A second set of variations involves special commissions that some countries have established for EIA reviews. For example, in the Netherlands the EIA Commission is set up to make comments at the scoping stage and review Environmental Impact Statements (EISs) for adequacy. The EIA Commission in the Netherlands is an independent body, comprising a chairman appointed by the Council of Ministers, two

26. GLASSON ET AL., supra note 2, at 46.
28. Id. at art. 14, para. 1.
29. Id. at art. 14, para. 2.
30. GLASSON ET AL., supra note 2, at 46, 304–05.
vice-chairmen, and a full-time staff of about 25 persons.\footnote{31} Taiwan is another example. In Taiwan, the EIAA mandates that EIA-responsible agencies establish EIA review commissions to review matters regarding EIA reports.\footnote{32} As to the composition of these commissions, the EIAA only mentions that experts and scholars must account for no less than two-thirds of commission members.\footnote{33} Administrative rules further address the details. For example, Taiwan’s EPA issued the Organizational Regulations of the Environmental Impact Assessment Review Commission of the Environmental Protection Administration of the Executive Yuan.\footnote{34} Under the Regulations, the EPA’s EIA review commission must consist of 21 commissioners, including the Minister and Deputy Minister of the EPA (as the chief commissioner and vice commissioner, respectively), five representatives from related agencies, and 14 experts and scholars appointed by the chief commissioner.\footnote{35}

The third set of variations involves different information supply designs. In many countries, such as most EU member states, environmental impact studies are prepared by developers or prepared by consultants for developers.\footnote{36} Taiwan is an example of this information supply system. In Taiwan, the EIAA mandates that when developers apply for development permits, they must provide an environmental assessment (EA), which is passed to the appropriate EIA-responsible agency for review.\footnote{37} Although EIA review commissions may collect new information and make an independent evaluation during their review, the basic information comes mainly from the developers. In contrast, under the U.S. NEPA, each agency is responsible for preparing its own informational documents as part of the EIA process. Although these agencies may require an applicant (for example, a developer) to submit environmental information, the “agency shall independently evaluate the information submitted and shall be responsible for its accuracy.”\footnote{38} While agencies prepare some EISs themselves, they may also select contractors to prepare them.\footnote{39} In the latter case, this responsibility still falls
on the agencies. According to the federal regulations, “[i]f the document is prepared by contract, the responsible Federal official shall furnish guidance and participate in the preparation and shall independently evaluate the statement prior to its approval and take responsibility for its scope and contents.”

C. Ultimate Goal: Sustainable Development

Although EIA systems in various countries may appear different, they pursue the same ultimate goal: sustainable development. Because understanding this goal is essential to crafting an ideal EIA system, the discussion in this section will lay the foundation for subsequent discussions in this article.

Sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” The concept has gained global recognition for the guidance it provides in comprehensively addressing economic, social, and environmental governance. In 1987, the World Commission on Environment and Development (WCED) published the famous report entitled “Our Common Future,” linking the future of our planet to the need for decisive actions based on sustainable development. Since then, the concept has dominated international discourse regarding social and economic development and environmental protection. In particular, the United Nations Conference on Environment and Development (UNCED, or the “Earth Summit”) in 1992, which produced the “1992 Rio Declaration and Programme of Action” and “Agenda 21,” further promoted the concept of sustainable development for international acknowledgement (by over 140 governments).

Broad and abstract goals need concrete mechanisms to be achieved, and EIA has been widely recognized as an important instrument for infusing sustainable development ideas into decision-making. Sustainability has been at the heart of EIA since its inception. With NEPA, the U.S. Congress declared an environmental policy goal of using “all practicable means and measures, including financial and technical

40. Id.
42. See Segger & Khalfan, supra note 1, at 1, 15.
43. Id. at 18.
44. Id. at 2.
45. Id. at 3, 20.
46. Sadler, supra note 9, at 183; see also Craik, supra note 22, at 77–82.
assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. To implement this substantive goal, Congress created EIA procedures in which agencies shall address “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity” in EISs. It is fair to say that EIA was born to address the crucial objective of sustainability.

While sustainability is the ultimate goal of EIA, the system serves multiple functions. Scholars have identified three major purposes of EIA: aiding decision-making, aiding the formulation of development actions, and acting as an instrument for sustainable development. First, EIA helps decision-makers comprehensively explore the implications of a proposed action and contributes to a more rational and systematic decision-making process. Second, EIA requirements make developers consider the location and design of their actions alongside environmental factors before the project begins, thereby minimizing adverse impacts, saving costs, and smoothing relationships with local communities. But while they are important, these first two purposes are merely immediate functions of EIA. They serve to achieve the third, ultimate purpose—sustainable development—which underlies all others. By integrating environmental considerations with other considerations, and by increasing information transparency and public participation, EIA improves the sustainability of agency decisions.

II. COMPARATIVE INSTITUTIONAL ANALYSIS OF ENVIRONMENTAL IMPACT ASSESSMENT

Comparative institutional analysis is a perspective that compares decision-making alternatives, all of which are imperfect, and selects the
best decision-making party.\textsuperscript{55} In other words, it is an analysis that focuses on the choice of who decides and demands a comparison of alternative decision-makers before making that choice.\textsuperscript{56} This perspective helps to understand the capacities of EIA systems and provides insights into adequate institutional responses to current problems. This part of the article approaches EIA systems from this perspective to explore the pros and cons of three key forms of governmental decision-making in the context of EIA: political processes, expert governance, and judicial review.

A. Political Processes

The political process, in which decisions are made through elected representatives, is fundamental part of governmental decision-making under democratic constitutions. However, political processes do not function similarly well in all circumstances. In fact, they can be severely dysfunctional.\textsuperscript{57} It is worth exploring how well or how poorly political processes are suited for addressing environmental concerns, and how EIA improves the capacity of political processes to address these concerns.

When faced with a decision involving an environmental interest, political processes inherently suffer from minoritarian bias—the over-representation of concentrated interest groups in the political process.\textsuperscript{58} This bias tends to skew decision-making against environmental protection. First, developers, polluters, and resource exploiters generally have a disproportionately greater influence on political processes. They have concentrated interests at stake and are therefore highly motivated to participate in political processes. Moreover, these groups often belong to a


\textsuperscript{56} See Imperfect Alternatives, supra note 55, at 3.

\textsuperscript{57} The malfunctions of political processes have been an important subject of constitutional discourse. See, e.g., John Hart Ely, Democracy and Distrust: A Theory of Judicial Review 73–104 (1980).

wealthier class and occupy a privileged position in politics. Second, the interests of the general public are naturally underrepresented in political processes. Even though the health and environmental interests of the public as a whole are vast, each individual has only minor interests at stake. This dispersion of interests leads to insufficient participation in political processes because the interests of each individual are too small to motivate effective action. Moreover, environmental issues come with the “public good problem,” that is, the factors of transaction costs and free-riding prevent affected individuals from engaging in effective action. In addition, individual members of the public lack the expertise, money, and time to investigate and analyze the complex interactions of environmental factors. The combination of these two factors encourages minoritarian bias to occur and the resulting governmental decision-making may disproportionately favor development over environmental protection.

A third factor exacerbates minoritarian bias in the context of environmental affairs. Environmental issues generally involve the consideration of long-term interests. Examples of long-term, continuous harm are ubiquitous in the environmental context, such as radioactive substances, PCBs, DDT, chlordane, dieldrin, and dioxin. On a larger scale, global warming and a decrease in biodiversity showcases even more vividly the multi-generational impacts of our policy choices. However, in political processes, it is common for decision-makers to focus on the immediate interests of development while overlooking future needs. This is why sustainable development concepts are necessary, urging policy-makers to fairly weigh future interests. Unfortunately, political processes are bad at including long-term considerations into decision-making. A major concern of elected representatives is whether they can win reelection in a couple of years, which tends to encourage short-sighted decision-making. Moreover, future generations have no voice or power in today’s political processes. As a result, the overrepresentation of concentrated interest groups becomes more prominent compared to the public interests of both the current and future generations in political processes.

While administrative and legislative processes are both types of political processes, administrative processes generally suffer from a minoritarian bias that is more severe than the bias seen in legislative

60. Id.
62. See Sinden, supra note 59, at 1438; IMPERFECT ALTERNATIVES, supra note 55, at 96.
64. Id.
processes. Because administrative processes are more complex and opaque, it is easier for concentrated interests to unduly influence decisions and, at the same time, it is harder for diffused public interests to participate in and oversee the processes. Politicians may even play a two-faced strategy, claiming to protect public environmental and health interests and even supporting broad (but vague) legislation to appease the voters, while at the same time blocking implementation of that legislation through procedural and technical maneuvers—quashing environmental considerations “in the more complex, more hidden world of the bureaucracy” to satisfy developmental interest groups.

Against this backdrop, EIA can be understood as a mechanism that responds to political malfunction by requiring consideration of environmental factors. Because agencies tend to ignore environmental interests, the straightforward remedy is to make the consideration of environmental factors a clear legal mandate. Nevertheless, enacting a law does not necessarily lead to the complete realization of the ideal behind it. Commentators have pointed out that despite their legal mandate, agencies have little or no incentive to adequately perform their duty to assess environmental impacts. In fact, the minoritarian bias identified in the previous analysis can drive agencies to actively undermine the effectiveness of EIA and avoid burdening developmental projects.

Public participation, an elemental part of EIA, may help decrease political malfunction, but cannot eliminate it. The legal mandates that require public notice, administrative records inspection, and allow for public involvement impose some external scrutiny on administrative processes. Scrutiny from NGOs and activists representing public interests may provide additional information to decision-makers, uncover defects in EIA documents, and attack bias displayed by agencies. This makes it difficult for agencies to completely sideline environmental values in opaque administrative processes. Accordingly, public participa-

65. See Sinden, supra note 59, at 1448.
66. Imperfect Alternatives, supra note 55, at 96.
tion in EIA can be understood as a response to the potentially secret character of administrative processes and their tendency to favor developmental interest groups.

Unfortunately, EIA designs in some countries place less emphasis on public participation.\textsuperscript{70} In such cases, reliance on public participation to remedy political malfunction fails. More significantly, even if the law has equipped the EIA with a strong mechanism for public participation, agencies have little or no incentive to adequately perform their duty to allow it. Minoritarian bias drives them to undermine the legal requirements of environmental consideration by loosely interpreting provisions, halting prosecutions, or engaging in other procedural and technical maneuvers to minimize public oversight. Thus, while public participation is critical to address the failures of political processes in EIA, it is not enough. Other institutional designs and responses to minoritarian bias are necessary.

B. Expert Governance

In addition to the public participation mechanism, EIA has another very different tool for responding to the failure of political processes: the concept of expert governance. Scientists and other experts play critical roles in EIA processes, and their professional assessments constitute the central part of EIA. To a certain extent, EIA is an expert-driven exercise.\textsuperscript{71} The concept of comprehensive rationality, viewing EIA as an instrument that systematically gathers information and conducts scientific and technical analyses to reach an optimal decision, strongly affected the creation of EIA and how assessments are conducted.\textsuperscript{72}

The intention to incorporate expert governance into EIA is even clearer in countries that have established special commissions for EIA reviews or consultations. These special EIA commissions reflect the concept of expert governance in that their “members are selected on the basis of their expertise”\textsuperscript{73} and they “function relatively independent from both initiator and competent authorities.”\textsuperscript{74} Their expert membership demonstrates an intention to systematically include expertise into decision-making processes, while their independence evinces an intention to allow them to avoid the political pressures of ordinary administrative

\textsuperscript{70} C\textsuperscript{RAIK}, \textit{supra} note 22, at 44.

\textsuperscript{71} \textit{Id.} at 52.

\textsuperscript{72} \textit{Id.} at 38–39.

\textsuperscript{73} \textsc{Erik Mostert}, \textit{Commissions for Environmental Impact Assessment: Their Contribution to the Effectiveness of Environmental Impact Assessment} 93 (1995).

\textsuperscript{74} \textit{Id.}
processes and to concentrate on professional assessments and judgments.

The incorporation of expert governance in EIA can help respond to failures in political processes. Expert governance bases decisions on objective knowledge rather than on the preference of the majority or powerful minorities. However serious the political malfunction is, as long as the decision-making is subjected to expert governance, the integrity of the decision should theoretically remain intact. Nevertheless, an absolute reliance on experts can pose problems. Doing so poses the danger of expert dictatorship and profoundly departs from democratic constitutionalism. This is probably why no country formulates its EIA system in a way that allocates decision-making power entirely to experts. EIA only constitutes a part of the decision-making process regarding a development project. It injects expert participation into decision-making but does not substitute the whole political process with expert judgment. In so doing, EIA functions to balance ordinary political decisions against minoritarian bias without entirely substituting technocracy for democracy.

The effectiveness of expert governance in responding to political malfunction relies on two primary factors. First, there is the question of whether or not the experts are independent. As a part of the executive branch, experts in EIA are not completely immune to pressure from high-level government powers. Politicians are motivated to appropriate scientific data and language to support their political decisions because the neutral, rational appearance of science makes their decisions appear legitimate in the eyes of the public. As a result, when this mechanism is not sufficiently independent, expert opinions are likely to be manipulated. The amount of independence that experts have depends on the design of EIA systems. For example, in Taiwan the law establishes a special commission for reviewing EIAs and therefore creates some independence for expert governance. On the other hand, because the Minister of the EPA holds the position of the chief commissioner, chairs EIA review meetings, and has the power to name all expert commissioners, the EPA substantially influences the EIA commission. While the EPA always contends that the decisions of the commission arise entirely from profes-

75. Jeffery, supra note 1, at 464.
sional judgment, there are many signs the EIA process in Taiwan is being manipulated, as will be shown later in this article.

Second, there is the question of whether the source of the information experts rely on is prejudiced. The accuracy and integrity of information used by expert decision-makers is the foundation of a sound assessment. Therefore, whoever supplies the information and its interpretation becomes of considerable importance. In many countries, governments outsource the responsibility for preparing environmental impact reports to developers, thereby putting the reliability of those reports at risk. Developers, who have concentrated interests in the passage of projects, are motivated to show the bright side and hide the dark side of projects. In practice, developers usually hire consultants to prepare the statements, and the consultants are likely to paint a picture of the project that caters to their clients’ preferences. In contrast, opposing parties, such as local residents and NGOs, lack the resources to hire consultants and are not legally in a position to offer their own environmental impact reports. As a result, the outcome of EIAs can be grounded largely on biased information and interpretations.

C. Judicial Review

Judicial review plays an important role in checking and restraining the political branches of a government. Theoretically, agencies must faithfully comply with EIA legal mandates. However, EIA can truly work only where courts enforce EIA-related rules against agencies. Thus, through their review and decisions, courts shape the substance and development of EIAs.

Compared with political processes, judicial review occupies a more uncomfortable position in EIA decision-making. First, courts lack expertise in scientific and other non-legal fields. Because addressing environmental affairs demands scientific and predictive capabilities, the judiciary is usually thought to be ill-equipped to handle environmental issues. However, the gap between courts and agencies on issues requiring technical expertise should not be exaggerated. Courts frequently face

78. See MOSTERT, supra note 73, at 71.
79. The design of proponent-generated EIAs has been widely criticized for its lack of objectivity. See Jeffery, supra note 1, at 463; Mark Squillace, An American Perspective on Environmental Impact Assessment in Australia, 20 COLUM. J. ENVTL. L. 43, 101 (1995).
80. See French, supra note 67, at 955–56; see also Squillace, supra note 79, at 113–14.
technologically complex cases. To promote their best interests, parties try to explain technology-related facts using plain language, especially when they have the burden of proof. Moreover, courts may rely on the testimony of experts in proceedings to diminish their weakness with respect to scientific expertise.

Second, and more profoundly, the counter-majoritarian difficulty has always troubled courts. Judicial review seems inconsistent with democracy when it overturns the decisions of political branches, which theoretically reflect the voters’ will. However, in the context of reviewing administrative actions such as EIA decisions and development permits, courts do not invalidate laws; rather, they enforce laws against illegal administrative actions. Therefore, the counter-majoritarian difficulty arising in the context of a court invalidating democratic laws may not completely apply in the context of invalidating EIA decisions. More importantly, even in the context of reviewing laws themselves, courts can apply the representative-reinforcing approach—which highlights the function of judicial review in enhancing democracy—to compellingly respond to the counter-majoritarian difficulty. Political processes do not always work perfectly. Where failures of political processes are likely to occur, stricter judicial review is needed to act as a check and balance on political malfunction. As mentioned, environmental affairs tend to suffer from minoritarian bias, and the likelihood of political malfunction justifies the strict review of courts. Therefore, if there is some concern that judicial review of political decision-making is anti-democratic, this concern is less appropriate in the context of judicial review of an EIA.

Furthermore, courts have relative advantages in responding to the minoritarian bias that occurs in EIA. First, the judiciary is better insu-

82. Even in the area of climate change, which is a multilevel and multidisciplinary challenge, courts in the United States and other jurisdictions have played important roles in promoting policy and legal development. See Jiunn-rong Yeh, Emerging Climate Change Law and Changing Governance, in CLIMATE CHANGE LAW: INTERNATIONAL AND NATIONAL APPROACHES 24, 39–40 (He Weidong & Peng Feng eds., 2012).

83. This is a classic issue in constitutional law. See, e.g., Kathleen M. Sullivan & Gerald Gunther, CONSTITUTIONAL LAW 19–20 (15th ed. 2004); David Crump et al., CASES AND MATERIALS ON CONSTITUTIONAL LAW 11–12 (3d ed. 1998).


85. Sinden, supra note 59, at 1443 (“Judicial review is often seen as a corrective for distortions in agency decision making caused by the undue influence of powerful private groups, and it can sometimes play such a role.”).
lated from political influence than agencies are. Independence is a main
case of the judiciary. Judges serve for life, or at least for longer
terms than political officials, and are therefore more insulated from the
political marketplace. The removal of judges is limited by law, and the
prospect of attracting judges to alternative job opportunities is limited by
the fact that there are few jobs as enticing as a judgeship. Therefore,
political and market factors have difficulty influencing judges through re-
placement or inducement strategies. In addition, information reaches
courts mainly through the courtroom and the adversarial process, which
further enhances the judiciary’s insulation from unequal influence. Due
to these features, minoritarian bias can have much less impact on court
decisions.

Second, judges are in a better position to weigh long-term inter-
ests. It has been suggested that, among all institutions of our govern-
ment, courts should be the pronouncer and guardian of enduring values.
“Judges have, or should have, the leisure, the training, and the
insulation to follow the ways of the scholar in pursuing the ends of gov-
ernment. This is crucial in sorting out the enduring values of a society.”

By comparison, political branches are usually motivated by expediency
because they serve for short terms and are more beholden to the electo-
rate. Simply put, political branches are bad at taking a long-term view
because they focus on immediate, tangible achievements, and reelection.
It follows that, when issues demand a long-term perspective, courts
would do a much better job at addressing them than political branches
would. Environmental issues are riddled with such long-term considera-
tions and therefore judicial review should play a much more substantial
and active role in the context of EIA. This should counter the conven-
tional perspective that emphasizes only the disadvantages of courts in
terms of their lack of expertise and political insensitivity. Where mi-
noritarian bias is prominent, the merits of courts in resisting it become
particularly valuable.

Nevertheless, certain factors may influence the effectiveness of ju-
dicial review in responding to political malfunction. For example, the

86. D. Hiep Truong, Daubert and Judicial Review: How does an Administrative Agency
87. See KOMESAR, supra note 58, at 36.
88. Id.
89. Id. at 36.
90. ALEXANDER M. BICKEL, THE LEAST DANGEROUS BRANCH: THE SUPREME COURT AT THE
91. Id. at 25–26.
92. See id. at 25.
93. See IMPERFECT ALTERNATIVES, supra note 55, at 140.
law of standing limits access to the judicial process. If lawmakers do not relax the requirement of standing to allow people to initiate litigation in the name of the public interest, courts will hardly have a chance to contribute. The independence of specific types of courts is also a consideration: where judges are politically appointed or elected, as in the United States, a skewed distribution of interests might still permeate the judiciary. Perhaps the most profound factor is the attitude of judges themselves. Where courts are passive, it leads to a tendency to defer to agencies in various legal issues.94 In many countries, scholarly discourse calls for significant deference to administrative EIA decisions because of the expertise gap between courts and agencies. This approach may lead to, or at least strongly reinforce, a passive attitude of courts, and a corresponding failure of the courts to counter minoritarian bias in EIA.

III. ANALYSIS IN ACTION: TAIWAN AS AN EXAMPLE

A. Evident Political Malfunction

The EIA practices of Taiwan exemplify the sort of malfunctioning administrative process that this article has discussed at a theoretical level. Taiwan has rather advanced EIA law. However, evidence shows that agencies do not sincerely carry out their duty to account for environmental effects; rather, agencies regard EIA as a bother and tend to undermine its effectiveness. This portion of the article illustrates this bias with an overall observation regarding the use of the second stage review, as well as three case studies.

1. Overall Observation: Essence of EIA Processes Undermined

Although proving the existence of the biased attitude of agencies on a large scale is difficult, many commentators have done so by pointing to the fact that Taiwan’s EIA-responsible agencies tend to avoid conducting the second and most substantial stage of the country’s EIA process.

Taiwan’s EIA process consists of two stages. In the first stage, a developer prepares an EA to be reviewed by the EIA-responsible agency.95 If the developmental project “may have significant effects on

94. For a related observation in the United States, see Sinden, supra note 59, at 1443–44 (mentioning that “administrative law contains built-in biases that tend to favor regulatory objects over regulatory beneficiaries. These include the presumption against review of agency inaction, the doctrine of standing, and the law’s general preference for negative injunctions prohibiting regulatory action over affirmative injunctions spurring regulatory action.”).

the environment,” the responsible agency must proceed to the second stage.96 After entering the second stage, the developer is required to display the EA to the public and hold an informative public meeting.97 After the hearing, local residents may submit their opinions in writing within 15 days. In addition, the responsible agency invites the competent authority (the agency in charge of the proposed development action), related agencies, groups, scholars, experts, and local residents to define the scope of assessment (“scoping”).98 The developer must then prepare a draft of the environmental impact statement (EIS) after accounting for the opinions from various sides.99 After receiving the EIS draft, the competent authority shall invite experts, scholars, groups, and local residents—along with the responsible agency, EIA committee members, and related agencies—to conduct an on-site inspection and hold a public hearing.100 Finally, the responsible agency issues a review conclusion and approves the final version of the EIS.101

This description of Taiwan’s EIA mechanism should make it clear that the first stage is only a screening process, and that a substantial, meaningful assessment happens only in the second stage. First, scoping—the initial step of an assessment—does not take place until the second stage of EIA. Second, only after a project enters the second stage does the responsible agency gather information on its own by engaging in on-site inspections and collecting opinions from experts, scholars, groups, and local residents. (Before the second stage, it relies only on the information provided by the developer.) Third, the mechanisms of public participation—including an informative meeting, opinion submission, and a public hearing—are provided for only in the second stage. Therefore, the second stage embodies the core spirit of EIA. In contrast, the sole purpose of the first stage is to quickly screen out the projects that pose no threat of significant impact on the environment. Many court opinions include the following statement: “In the first stage, [a responsible agency] only makes a formalistic, paper-based review on a prospective analysis provided by the developer itself; after entering the second stage, the review begins to enter a more deliberate process and includes public participation.”102 This shows that courts have somewhat embraced

96. Id. at art. 8.
97. Id.
98. Id. at art. 10.
99. Id. at art. 11.
100. Id. at art. 12.
102. See, e.g., Supreme Administrative Court decision No. 2009-Pan-475; Supreme Administrative Court decision No. 2009-Pan-708; Supreme Administrative Court decision No. 2009-Pan-772; Supreme Administrative Court decision No. 2010-Pan-30.
the understanding of the structure of the first and second stages presented above. Therefore, how often the second stage is used is an accurate indicator of how much the EIA ideal has been realized. The more projects that enter the second stage, the more deliberate the EIA processes become, including elements such as scoping, on-site inspection, and public participation. For EIA mechanisms to function meaningfully in Taiwan, a substantial proportion of projects must undergo the scrutiny contained in the second stage.

Unfortunately, several studies have revealed that most cases are approved in the first stage, and that the second stage is hardly used.103 According to a recent study examining statistics from 1998 to 2011, only 3.2 percent of cases were ordered to continue to the second stage (see Table 1). Among the 1,932 total cases in this period, 20 were approved in the first stage, 1,443 were approved with conditions in the first stage, and only 62 were referred to second-stage review. Moreover, the cases that were ordered to enter the second stage mostly occurred between 1998 and 2001, and the number declined sharply after 2002. In addition, many cases that should have continued to the second-stage review did not actually enter the second stage. The worst period was 2004 to 2010, during which only three cases entered the second stage (see Table 2).104 Hence, entering and completing the second stage has become a rare phenomenon. This has largely diminished the effectiveness and undermined the spirit of EIA.


104. Hsiao, supra note 103, at 25, 28.
INSTITUTIONAL ROLES OF POLITICAL PROCESSES

Table 1: Statistics of EIA Reviews in the First Stage (EA)
(1998–2011)\textsuperscript{105}

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Reviewed Cases</th>
<th>Approved</th>
<th>Approved with Conditions</th>
<th>Percentage of Cases Approved with Conditions</th>
<th>Decided to Proceed to the Second Stage</th>
<th>Percentage of Cases Decided to Proceed to the Second Stage</th>
<th>Development Rejected</th>
<th>Other Disposal</th>
<th>Returned for Formality Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>176</td>
<td>0</td>
<td>127</td>
<td>72.2%</td>
<td>10</td>
<td>5.7%</td>
<td>5</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>1999</td>
<td>246</td>
<td>5</td>
<td>150</td>
<td>61.0%</td>
<td>13</td>
<td>5.3%</td>
<td>13</td>
<td>50</td>
<td>15</td>
</tr>
<tr>
<td>2000</td>
<td>174</td>
<td>2</td>
<td>112</td>
<td>64.4%</td>
<td>10</td>
<td>5.8%</td>
<td>16</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>2001</td>
<td>176</td>
<td>1</td>
<td>137</td>
<td>77.8%</td>
<td>7</td>
<td>4.0%</td>
<td>12</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>2002</td>
<td>117</td>
<td>4</td>
<td>82</td>
<td>70.1%</td>
<td>2</td>
<td>1.7%</td>
<td>8</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>2003</td>
<td>106</td>
<td>0</td>
<td>78</td>
<td>73.6%</td>
<td>2</td>
<td>1.9%</td>
<td>8</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>2004</td>
<td>129</td>
<td>0</td>
<td>108</td>
<td>83.7%</td>
<td>2</td>
<td>1.6%</td>
<td>9</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>120</td>
<td>2</td>
<td>93</td>
<td>77.5%</td>
<td>2</td>
<td>1.7%</td>
<td>12</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>2006</td>
<td>110</td>
<td>1</td>
<td>84</td>
<td>76.4%</td>
<td>1</td>
<td>0.9%</td>
<td>11</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>2007</td>
<td>137</td>
<td>0</td>
<td>114</td>
<td>83.2%</td>
<td>1</td>
<td>0.7%</td>
<td>5</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>2008</td>
<td>127</td>
<td>0</td>
<td>107</td>
<td>84.3%</td>
<td>1</td>
<td>0.8%</td>
<td>1</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>2009</td>
<td>108</td>
<td>1</td>
<td>87</td>
<td>80.6%</td>
<td>6</td>
<td>5.6%</td>
<td>1</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>2010</td>
<td>119</td>
<td>3</td>
<td>93</td>
<td>78.2%</td>
<td>2</td>
<td>1.7%</td>
<td>3</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>87</td>
<td>1</td>
<td>71</td>
<td>81.6%</td>
<td>3</td>
<td>3.5%</td>
<td>2</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1932</td>
<td>20</td>
<td>1443</td>
<td>74.7%</td>
<td>62</td>
<td>3.2%</td>
<td>106</td>
<td>226</td>
<td>75</td>
</tr>
</tbody>
</table>

\textsuperscript{105} Id. at 25.
Table 2: Statistics of EIA Reviews in the Second Stage (EIS) (1998–2011)\textsuperscript{106}

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Number of Reviewed Cases</th>
<th>Approved</th>
<th>Approved with Conditions</th>
<th>Percentage of Cases Approved with Conditions</th>
<th>Development Rejected</th>
<th>Other Disposal</th>
<th>Returned for Formality Reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>30</td>
<td>1</td>
<td>28</td>
<td>93.3%</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>23</td>
<td>0</td>
<td>20</td>
<td>87.0%</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2000</td>
<td>14</td>
<td>0</td>
<td>12</td>
<td>85.7%</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
<td>11</td>
<td>0</td>
<td>9</td>
<td>81.8%</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>100.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2003</td>
<td>5</td>
<td>0</td>
<td>5</td>
<td>100.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2004</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>50.0%</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>2008</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2009</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>100.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>1</td>
<td>78</td>
<td>85.7%</td>
<td>5</td>
<td>6</td>
<td>1</td>
</tr>
</tbody>
</table>

The overall trend of agencies avoiding the second stage reveals the agency mindset—they deem EIA as a bother and want to quickly rid themselves of the process. As a general rule, they do not sincerely care about the spirit of EIA or their duty imposed by EIA statutes, and they do not mind EIA operating in a manner contrary to its design. This agency mindset can be even more clearly illustrated by the following observation. First, after NGOs and legal scholars pointed out the fading of the second stage, the Taiwan EPA declined to change its practices, arguing that the second stage’s rate of use in Taiwan is not low in comparison to the rate of similar second-stage review in the United States.\textsuperscript{107}

Second, a major cause behind the idleness of the second stage is the abuse of the “approval with conditions” option in the first stage (see Table 1). Scholars criticized the EPA’s mistaken interpretation of the law, which greatly expands the use of this option in the first stage.\textsuperscript{108}

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\textsuperscript{106} Id. at 28.


ever, the EPA did not accept the criticism and even attempted to write its interpretation of the law into the Environmental Impact Assessment Enforcement Rules. The EPA’s response is evidence that the EPA is consciously attempting to avoid second-stage EIA.

2. Case Study 1: Central Taiwan Science Park Phase 3

The Central Taiwan Science Park Phase 3 developmental project generated one of the most consequential environmental movements in Taiwan. In particular, EIA litigation arising from this project was a milestone in the use of legal action to pursue environmental justice and sustainability in the country. At the same time, the behavior of the central government in the controversy offers a vivid example of how biased administrative agencies can distort EIA.

The Central Taiwan Science Park Administration established the Central Taiwan Science Park Phase 3 in Houli, Taichung to provide land and facilities for high-tech industries. The administration divided the project into two parts, the Houli Farm part and Cising Farm part, and each was submitted for EIA separately. On February 27, 2006, the EPA approved the EIA of the Houli Farm part in the first stage of EIA review. A day later, nine of the 21 EIA review commission members called a press conference, criticizing political interference with the EIA review and questioning the division of the project into its two parts. On June 30, 2006, the EIA of the Cising Farm part was also passed in the first stage, with a close vote of ten to eight. Several commission members who had argued that problems regarding serious pollution and water demand had not been adequately addressed walked out during the review, with two of them claiming that EIA was dead and resigning on the spot.

With the assistance of environmental NGOs, six local residents filed a lawsuit against the EIA decision on Cising Farm. On January 31, 2008, the Taipei High Administrative Court held that the EIA decision

109. Chen & Huang, supra note 108, at 33–35. Later, controversy over the proposed revision eventually forced the EPA to backtrack.

110. A science park is an industrial park established by the central government to promote the development of high-technology industries. The companies that manufacture or develop high-technology products as well as the companies that provide services for high-technology industries may apply for stationing in science parks. Act for Establishment and Administration of Science Parks (July 27, 1979) (as amended through Jan. 12, 2011), arts. 1, 4, available at http://law.moj.gov.tw/Eng/LawClass/LawContent.aspx?PCODE=H0160004.

111. Chang, supra note 103, at 21.

112. Id. at 21–22.
was indeed flawed and therefore revoked it.\textsuperscript{113} The major reason the court gave for invalidating the decision was that the agency rashly concluded that the project posed no significant concern to the health and safety of the public, even though it had not conducted a health risk assessment.\textsuperscript{114} The EPA appealed. Meanwhile, AU Optronics Co. Ltd., a leading TFT-LCD manufacturer for which the Cising Farm part was mainly planned, began construction at the science park.\textsuperscript{115} On January 21, 2010, the Supreme Administrative Court sustained the decision of the lower court.\textsuperscript{116}

According to the EIAA, the EPA is responsible for ordering the development to halt until a new EIA is completed.\textsuperscript{117} However, the EPA refused to issue such an order. Environmental NGOs and the legal community were outraged by the EPA’s response. Two organizations of attorneys initiated a campaign to protest the intentional inaction of the agencies, and at least six legal scholars published articles rebutting the EPA’s incorrect or skewed interpretations of the law. The EPA responded by issuing many press releases attempting to justify its position.\textsuperscript{118}

Because the development at the Cising Farm part continued without a valid EIA, local residents took further legal action, seeking injunctions from the courts. On July 30, 2010, the Taipei High Administrative Court issued injunctions to temporarily bar any development work.\textsuperscript{119} However, the Executive Yuan claimed that the two private companies stationed in the science park were unaffected by the injunctions.\textsuperscript{120} This interpretation distorted the law and undermined the effect of injunctions, which resulted in another wave of criticism from legal scholars.\textsuperscript{121}

\begin{itemize}
  \item \textsuperscript{113} Taipei High Administrative Court decision No. 2007-Su-1117.
  \item \textsuperscript{114} Id.
  \item \textsuperscript{115} Chang, \textit{supra} note 103, at 23.
  \item \textsuperscript{116} Supreme Administrative Court decision No. 2010-Pan-30.
  \item \textsuperscript{117} See \textit{Environmental Impact Assessment Act}, \textit{supra} note 27, at art. 22.
  \item \textsuperscript{119} Taipei High Administrative Court ruling No. 2010-Ting-54; Taipei High Administrative Court ruling No. 2010-Quan-43.
  \item \textsuperscript{120} 2010 \textit{Administrative Regulation and Administrative Litigation} 513–14 (Cheng-Yi Huang ed., 2011) (in Chinese).
  \item \textsuperscript{121} At least four legal scholars wrote articles criticizing the government for mistakenly interpreting the law. Chen, \textit{supra} note 118, at 10.
\end{itemize}
At the same time, the EPA expedited EIA review and issued a new EIA decision on August 31, 2010, only one month after the injunctions were issued.\textsuperscript{122} This new EIA also did not enter the second stage. Moreover, according to news reports, the Premier of the Executive Yuan publicly expressed on August 15, 2010 that he was 100-percent certain that the administration and companies could get rid of the court injunctions (which he deemed a “curse” and “dark cloud”) when the EIS was to be released the following week.\textsuperscript{123}

The local residents filed a lawsuit to challenge this second EIA decision. Although the Taipei High Administrative Court ruled to sustain the second EIA decision on September 11, 2012,\textsuperscript{124} the judgment was vacated by the Supreme Administrative Court on March 14, 2013.\textsuperscript{125} The Supreme Administrative Court pointed to several potential problems in the EIA decision and held that the lower court failed to consider them. As a result, the case was vacated and remanded back to the High Administrative Court.\textsuperscript{126} As of this writing, the parties still await the second decision of the High Administrative Court. But the problems indicated by the Supreme Administrative Court opinion show that the EPA did not sincerely reconsider its actions after the previous EIA decision was struck down.

3. Case Study 2: Beautiful Bay Resort

On December 14, 2004, the Taitung County Government and Beautiful Bay Resort Co. Ltd. agreed on a contract to develop a beach area using the build-operate-transfer (BOT) model.\textsuperscript{127} The entire project involved 59,956 square meters of land, which was officially listed as two parcels, numbered No. 346 and No. 346-2. According to EIA regulations, developments of this type are required to undergo an EIA if the development area is larger than 1 hectare (that is, 10,000 square meters); therefore, Beautiful Bay should have submitted this project for EIA. However,
on February 21, 2005, Beautiful Bay applied to combine No. 346 and No. 346-2 as one parcel and re-divide the parcel into two parcels renumbered No. 346 and No. 346-4, thus reducing No. 346-4 to less than 1 hectare (exactly 9,997 square meters). On March 8, 2005, the Taitung County Government approved the combination and re-division of the lands. After the Taitung County Government granted a building permit (including an accompanying statement that an EIA was not required) on October 7, 2005, Beautiful Bay began building a hotel on No. 346-4 without undergoing an EIA in advance.128 On September 26, 2006, Beautiful Bay submitted the entire project for EIA review because it wanted to begin developing the villa area on No. 346 (the remaining parcel, with an area of 49,959 square meters).129

Before the EIA was completed, on May 11, 2007 an environmental NGO requested that the Taitung County Government comply with Article 22 of the EIAA by fining Beautiful Bay and ordering a halt to the construction.130 However, the Taitung County Government did not act. The NGO then filed a citizen suit to stop the construction. On January 23, 2008, the Kaohsiung High Administrative Court decided in favor of the NGO, finding that the project should have undergone an EIA in advance and that combining and re-dividing the land was intended to circumvent the duty to conduct an EIA.131 It is worth noting that the NGO and local residents also sought a temporary injunction to prevent the environmental damage from worsening before the judgment was issued. However, the Kaohsiung High Administrative Court overruled this petition, and the Supreme Administrative Court sustained the ruling of the lower court on August 2, 2007.132 Thus, construction continued during the citizen suit.

On July 22, 2008, the Taitung County Government passed the EIA. Because of several controversies during the EIA process, local residents

128. Kaohsiung High Administrative Court decision No. 2007-Su-647; Kaohsiung High Administrative Court decision No. 2010-Su-Geng-Yi-8.
129. Kaohsiung High Administrative Court decision No. 2009-Su-47.
130. Article 22 of the EIAA provides that “[t]hose developers that, prior to receiving the authorization of the EIA-responsible agency pursuant to Article 7 or Article 13, conduct a development action listed in Article 5, Paragraph 1 shall be fined NT$300,000 to NT$1,500,000; for such a developer, the EIA-responsible agency shall notify the competent authority to issue an order for the suspension of the implementation of the development action. When necessary, the EIA-responsible agency may directly issue an order for the suspension of the implementation of the development action; for those that fail to comply with such an order, the statutory responsible person shall be punished by a maximum of three years imprisonment, detention and may be fined a maximum of NT$300,000.” Environmental Impact Assessment Act, supra note 27, at art. 22.
131. Kaohsiung High Administrative Court decision No. 2007-Su-647.
132. Supreme Administrative Court ruling No. 2007-Cai-1734.
took further legal action, claiming that the EIA decision was unlawful. The Kaohsiung High Administrative Court agreed and decided to revoke the EIA decision on August 10, 2009.\(^{133}\) According to the court, the EIA did not comply with regulations when conducting assessments: the EA neglected the effects of another resort project that was only 500–600 meters away, and omitted many assessment items while conducting the ecological investigation.\(^{134}\) The Taitung County Government then appealed. During the appeal, Taitung County granted a partial use license and building permit for the construction projects.\(^{135}\) Although local residents sought injunctions to halt the construction soon after the EIA revocation, the courts again refused to grant them.\(^{136}\) On January 19, 2012, the Supreme Administrative Court sustained the lower court’s judgment in revoking the EIA. Nevertheless, although a valid EIA—a prerequisite of the building permit and use license—had vanished, the Taitung County Government still affirmed the validity of the permit and license and refused to revoke them.\(^{137}\) The Magistrate of Taitung County stated, “The building has been completed there, and it was the County Government who invited them to build it in the first place. Discussing ‘for or against’ is no longer the point.”\(^{138}\) The Taitung County Government reinitiated the EIA process in June and passed the EIA on December 22, 2012.\(^{139}\)

4. Case Study 3: Taipei Dome

In January 2001, the Taipei City Government decided to build a large indoor stadium with a surrounding culture park on the site of a former tobacco plant and planned to use the BOT model to reduce the

\(^{133}\) Kaohsiung High Administrative Court decision No. 2009-Su-47.

\(^{134}\) Id.


\(^{136}\) Supreme Administrative Court ruling No. 2011-Cai-18; Supreme Administrative Court ruling No. 2012-Cai-115.


financial burden of the government. On June 11, 2003, the Taipei City Government Department of Cultural Affairs (the developer of the culture park section) and the Department of Education (the developer of the sports park section) submitted the project to the Department of Environmental Protection for EIA review. After the review, the Department of Environmental Protection (DEP) approved the project with conditions and promulgated the EIA decision on August 15, 2003. Because of internal disputes, the development was delayed for approximately two years. On October 3, 2006, the Taipei City Government and Farglory Dome Co. Ltd. signed a BOT contract to develop the sports park section.

As the development progressed, controversy arose regarding tree transplantation. In the sports park section, there were 137 trees protected by a Taipei city ordinance, as well as 944 unprotected trees. The developer planned to move 95 protected trees to a temporary planting area and move the 944 unprotected trees to three different locations. The transplantation began in 2004, but was soon halted when the project went on hiatus. After the BOT contract was signed, the Taipei City Tree Protection Commission approved the re-initiation of transplantation. However, because three years had passed since the development permit was issued, the developer had to submit an “analysis of environmental differences” for EIA review and fulfill other conditions before conducting any developmental action, according to the EIA decision of 2003 and the EIAA. Moreover, the project had been substantially modified; therefore, according to the law, the modification should have been reassessed for its environmental impact.

141. Taipei High Administrative Court decision No. 2009-Su-739.
143. Id. at 78–79.
144. Taipei City, Taiwan Decision No. Huan-Mi-Yi-09233072202 (Aug. 12, 2003); Environmental Impact Assessment Act, supra note 27, at arts. 16-1, 17.
145. According to article 38 of the Environmental Impact Assessment Enforcement Rules, if the scale of development is expanded more than 10 percent, the portion that is modified must be submitted again for EIA. Environmental Impact Assessment Enforcement Rules (Oct. 25, 1995) (as amended through June 17, 2005), art. 38, available at http://law.moj.gov.tw/eng/LawClass/LawContent.aspx?pcode=O0090002. In this case, Farglory expanded the building size of this project much more than 10 percent and, therefore, submitted the project for a new EIA on December 21, 2007.
Environmentalists complained to the DEP that the transplantation was unlawful. However, the DEP simultaneously proposed to revise the EA of the 2003 EIA to remove building demolition and tree transplantation from the concept of “developmental actions.” The EIA review commission approved the proposal on September 3, 2007. The government claimed that with this revision the transplantation work could proceed immediately because the transplantation was no longer a developmental action. NGOs also requested that the courts halt the transplantation until the EIA process was legally completed. On February 9, 2009, the Taipei High Administrative Court informed the parties that the hearing was scheduled for February 27. However, before that date, the government quickly moved the rest of the trees. Consequently, on the morning of the court date, only one tree remained. (In fact, the agency intended to move the final tree that morning before the court ruling, but failed to do so because of a protesting crowd.) Unfortunately, the court rejected the petition for injunction. On March 31, 2009, the government handed over clean land to Farglory.

New incidents and controversies regarding the project continued to arise that also reveal agency bias. For example, on September 10, 2009, the Control Yuan—the branch of Taiwan’s government that monitors other branches—proposed corrective measures to the Taipei City Government. The Control Yuan indicated that the government violated the law by allowing the winning applicant (the would-be builder of the project) to resubmit the “Investment Plan” and by signing a BOT contract that was problematic and wrongfully favored the winning applicant.

146. Chen, supra note 142, at 82.
147. Id.
148. Id.
150. Taipei High Administrative Court, Ruling No. 2009-Guan-3. The NGOs then appealed, but the Supreme Administrative Court sustained the ruling of the lower court on April 27, 2009. Supreme Administrative Court, Ruling No. 2009-Cai-952.
152. The Control Yuan also issued the proposal of corrective measures to the Public Construction Commission of the Executive Yuan for other reasons. Chen, supra note 142, at 38.
153. Investigation of the Taipei City Culture and Sports Park—a Developmental Project of a Large Indoor Stadium (Taipei Dome), CONTROL YUAN (Sept. 23, 2009), http://www.cy.
With respect to EIA, Farglory submitted documents to initiate a new EIA review on December 21, 2007. On June 28, 2010, the EIA review commission rejected the development because the expanded building size was excessively large and because of unsolved traffic concerns. However, the commission also mentioned that the developer could submit an alternative plan for a new review. Eventually, on a day in which half of the EIA review commission members present were agency representatives, the commission approved the alternative plan EIA on May 26, 2011. At approximately the same time, Farglory had problems meeting the contract deadline to receive a building permit and secure a financing contract, but the government repeatedly extended the deadlines. Eventually, Farglory obtained the building permit on June 30, 2011 and began construction on November 11 of that year.

**B. Emerging Public Participation**

When it comes to protecting environmental concerns, civil society in Taiwan has grown to become a considerable counterforce to biased agency attitudes. Along with the political liberalization of Taiwan in the mid-1980s, environmental awareness increased significantly and social movements became widespread. Another wave of civil activism emerged around the middle of the first decade of the twenty-first century. A milestone development in Taiwan’s environmental movement accompanied the emergence of this wave of civil activism: environmentalists began to purposefully use legal mechanisms to pursue the public interest. NGOs that aim to protect the environment by taking legal actions also appeared for the first time. This development resulted in not only more opportunities for courts to play a part in protecting the envi-

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158. The first NGO of this kind in Taiwan, the Wild at Heart Legal Defense Association, was founded in 2003. For information about the Wild at Heart Legal Defense Association see About Wild at Heart, WILD AT HEART LEGAL DEFENSE ASSOCIATION, http://en.wildatheart.org.tw/ (last visited Mar. 7, 2013). In 2010, another active NGO of this kind, the Environmental Jurists Association, was founded. For more information about the Environmental
ronment (a topic addressed by the next part of this article), but also resulted in increased public participation in administrative processes.

EIA is an important development channel for this emerging public participation. In recent years NGOs and environmentalists in Taiwan have played increasingly critical roles in identifying problems, distributing information, and building coalitions against many controversial developmental projects. EIA allows these NGOs to have more time, venues, and means to perform these functions. Scholars have indicated that EIA “has potential to promote sustainable development in multifarious ways.” Taiwan’s experience, even under the frustrating circumstances presented in the previous section, demonstrates the potential that vibrant public participation has for achieving sustainable results through EIA.

The case of the Eighth Naphtha Cracker Industrial Park project (also known as the Kuokuang Petrochemical project) is a perfect example. The goal of the project was to establish a gigantic Industrial Park in Dacheng, Changhua in order to expand the capacity of Taiwan’s petrochemical industry. The government expressed strong support and pushed forward the administrative processes necessary to begin the project. However, the wisdom of continuing to develop this high-pollution, high-energy-consumption industry had long been questioned, and public opposition to the project had grown. Because of the controversy over this project, the EIA process could not be quickly finished. In June 2009, the EIA review commission decided that the project should enter the second stage of EIA, which requires further and more detailed assessment than the first stage. NGOs and concerned citizens paid close attention to EIA review meetings and actively participated in debates. Contending that the developer offered flawed and insufficient assessments in the EIA process, many scholars volunteered to produce their analyses regarding ocean and wetland ecology, water resources, economics, public health risks, and overall assessments. In addition, activists initiated wave after wave of campaigns to put pressure on the government to give up the project. Astonishingly, more than 1,200 scholars across various specialties signed declarations opposing the project. Also, NGOs initiated a movement calling for donations to buy the land of the proposed location.


159. Cashmore et al., supra note 6, at 306.


161. See Wu & Wu eds., supra note 160, at 78–133 for these assessment opinions.

162. Id. at 210–17.
for conservation, and the effort generated numerous responses.\textsuperscript{163} In April 2011, before the EIA review commission reached a final decision, Taiwan’s President Ying-jeou Ma announced a political shift: he no longer supported the project. He asked the CPC Corporation, a government-owned company and the majority shareholder of the developer, to withdraw the proposal.\textsuperscript{164} With this, the project ended.

Although this case is unique, it shows the potential that public participation has for facilitating more sustainable governmental decisions, either through the EIA process or external to it.\textsuperscript{165} Two ingredients are essential: an active civil society provides the fuel and EIA offers the mechanism—the time, place, and manner. When the stakes are high, the mobilization of civil society can be powerful enough to overturn an established policy, even in the face of influential and highly concentrated interest groups. On the other hand, the observations in the previous section of this article show that mobilizing sufficient energy from civil society is rare. Minoritarian bias often remains the dominant force in EIA. Therefore, another critical role in this article’s proposed analytical framework—the judiciary—demands attention.

C. Swinging Courts

In recent years, courts in Taiwan have had more opportunities to participate in big-picture EIA decision-making, mainly because NGOs began to consider legal action as an important weapon in their fight. Courts have also repeatedly acknowledged the standing of local residents for filing actions to revoke EIA decisions, which has helped to open up space for a judicial role. As noted in Part II of this article, the judiciary is well poised to respond to the minoritarian bias that occurs in environmental affairs. However, the effectiveness of judicial review in responding to political malfunction largely depends on whether the courts’ attitude is active or passive. Like courts in the United States and

\begin{footnotesize}
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\item \textsuperscript{164} \textit{No Support From President Ma, the Kuokuang Petrochemical Project Ends}, UNITED DAILY NEWS (Taiwan), Apr. 22, 2011, \url{http://udn.com/NEWS/NATIONAL/NATS1/6290306.shtml} (in Chinese).
\item \textsuperscript{165} The rejection of the Kuokuang Petrochemical project can be deemed a more sustainable decision. For the analysis revealing that the Kuokuang Petrochemical project would not only seriously impact the environment but also disadvantage Taiwan’s economic development, see, \textit{e.g.}, Chung-Ming Liu, \textit{The Falsehood of BAU}, \textit{in WETLANDS, PETROCHEMICALS, AND IMAGINING AN ISLAND}, supra note 160, at 113 (in Chinese); Chi-Chung Chen, \textit{The Economic Analysis of Establishing the Eighth Naphtha Cracker Plant in Changhua}, \textit{in WETLANDS, PETROCHEMICALS, AND IMAGINING AN ISLAND}, supra note 160, at 101 (in Chinese).
\end{itemize}
\end{footnotesize}
elsewhere, courts in Taiwan have not agreed upon a consistent approach in addressing EIA cases. In some cases they carefully review EIA decisions, whereas in others they substantially defer to agency judgment.

Scholars generally agree that courts should respect agency judgments in cases involving non-legal expertise. The rationale is that with their specialized knowledge, agencies have a comparative advantage in making judgments in areas requiring this kind of expertise. Taiwanese courts deciding EIA cases regularly refer to that mainstream scholarly view and explicitly state that they apply deferential tests. In other words, no matter what level of deference judges eventually apply, they generally use deferential tests as the starting point for discussion. However, this is not to say that this deference to agencies prevails in all EIA litigations.

In some cases, courts have actually examined EIA decisions closely, even though they outwardly profess to have relied on deferential tests in their opinions. Perhaps these courts suspect that the challenged EIA decisions do not really deserve deferential respect. In those cases, courts looked into EA reports and records of the EIA review meetings and found incomplete and irresponsible health risk data and assessments, unanswered substantial environmental problems, or errors and insufficient information in the EA report. This sort of intrusive review exemplifies an active approach taken by some courts in reviewing administrative actions.

On the other hand, some courts take a far more passive approach. In a number of cases in which the plaintiffs raised controversial issues

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166. Chen, supra note 118, at 11–13. This basic rationale is not completely foreign to American jurisprudence, although the actual standards and scope of judicial review differ to some extent. See ALFRED C. AMAN, JR. & WILLIAM T. MAYTON, ADMINISTRATIVE LAW 446–47 (2d. ed. 2001); ROGER W. FINDLEY & DANIEL A. FARBER, ENVIRONMENTAL LAW IN A NUTSHELI 18–22 (7th ed. 2008).

167. See, e.g., Supreme Administrative Court decision No. 2009-Pan-475; Supreme Administrative Court decision No. 2009-Pan-708; Supreme Administrative Court decision No. 2009-Pan-732; Supreme Administrative Court decision No. 2009-Pan-772; Supreme Administrative Court decision No. 2010-Pan-30; Supreme Administrative Court decision No. 2010-Pan-639.

168. The academic community may think the same way about those EIA decisions. For example, the landmark court decision that struck down the EIA decision of the Central Taiwan Science Park Phase 3, Supreme Administrative Court decision No. 2010-Pan-30, received overwhelming praise from legal scholars. Chen, supra note 118, at 23.

169. See, e.g., Supreme Administrative Court decision No. 2010-Pan-30 (regarding the Central Taiwan Science Park Phase 3).

170. See, e.g., Supreme Administrative Court decision No. 2011-Pan-1022; Supreme Administrative Court decision No. 2011-Pan-1024 (regarding the Xindian Ankang landfill).

171. See, e.g., Supreme Administrative Court decision No. 2011-Pan-1040 (regarding the Hsinchu Hengshan landfill).
worth substantial consideration, these courts did not examine the issues in a meaningful way. Rather, they simply used the content of the EA or the statements of agencies to respond to the challenges, arguing that the issues had once been brought up in EIA review committees or that the assessment had followed the rules recognized by the EPA. At times, courts did not even provide a reason.\footnote{See, e.g., Taipei High Administrative Court decision No. 2009-Su-2173; Supreme Administrative Court decision No. 2011-Pan-1415 (regarding the Ching-Shan Power Plant); Taipei High Administrative Court decision No. 2011-Su-118 (regarding the Central Taiwan Science Park Phase 3); Taipei High Administrative Court decision No. 2010-Su-1882 (regarding the Central Taiwan Science Park Phase 4. It is worth noting that this court decision has been vacated and remanded by the Supreme Administrative Court. Supreme Administrative Court decision No. 2013-Pan-70).} In the context of EIA-related injunction cases, courts exercised this kind of passive attitude even more frequently, often construing the law strictly and woodenly, in their reluctance to grant injunctions.\footnote{This passive attitude can be seen in the cases of both the Beautiful Bay Resort and Taipei Dome, described earlier in this article.}

Overall, courts in Taiwan sometimes play a meaningful role in the EIA framework and sometimes they miss that opportunity. They are still struggling to decide the adequate level of scrutiny, and the different attitudes have led to divergent results. A consistent judicial approach is needed. In considering the likelihood of political malfunction and the valuable role courts can play in counteracting it, it is clear that courts should conduct active judicial review of administrative decisions.

IV. INSIGHTS FOR REFORM BASED ON COMPARATIVE INSTITUTIONAL ANALYSIS

This article has posited that minoritarian bias is the central challenge that EIA is meant to counter. Although EIA certainly helps to mitigate political malfunction, its effectiveness differs considerably depending on the design of the EIA process and the approach of the judges performing judicial review. Where minoritarian bias is still present in EIA, this article proposes strengthening the institutional responses against that bias. The potential responses consist of: (1) enhancing public participation, (2) reinforcing expert governance, and (3) heightening judicial review.

A. Enhancing Public Participation

Public participation improves political processes; therefore, enhancing public participation in EIA constitutes a partial cure for political malfunction. Although public participation has always been a compo-
nent of EIA systems, the strength of the mechanism varies. As previously mentioned, the EIA systems in some countries pay insufficient attention to public participation. Even in the United States, where EIA originated, commentators have criticized the design of the process for giving citizen groups little opportunity to produce comprehensive examinations and new data to compete with developmental proposals.

Even when the existing mechanisms of public participation are not defective, there is always room for improvement. Some scholars have suggested “utilizing means of interpreting data for decision makers; providing face-to-face communication between stakeholders, the citizenry, involved scientists and decision makers; allowing for ‘friendly’ examination of official views; and providing fora where interested persons can explain their identification and their understandings of impacts, including their own perspectives.” A further issue, largely overlooked by current legislation, is that effective and meaningful public participation demands capable “citizen power.” After all, where citizen groups lack the resources to recruit experts or to continuously follow the obscure process of administrative decision-making, the opportunity to participate is merely a token one. Therefore, future legislative reforms should seek methods to empower citizen groups to pursue robust public participation in EIA.

B. Reinforcing Expert Governance

A second means of improving the EIA process is through enhanced expert governance. For countries that do not include external experts in EIA processes, expert governance is a factor that should be added to the process. For example, the establishment of an EIA commission, consisting of experts from various fields, would be a valuable addition. For countries that already incorporate expert commissions into their EIA systems, the previous discussion indicated two major directions for reform: entrenching the independence of experts and reconsidering who provides information to decision-makers. To avoid the risk that these experts will be manipulated, the law should guarantee their terms of service and strictly limit the power of higher authorities to remove them. The law should also implement an appointment process for

174. Craig, supra note 22, at 44
175. French, supra note 67, at 970–71.
176. DiMento & Ingram, supra note 76, at 307. For some other suggestions, see, e.g., Squillace, supra note 79, at 105–06, 117.
177. Jeffery, supra note 1, at 454.
178. Id.
179. See Mostert, supra note 73, at 93.
EIA commissioners or EIA decision-makers with some elements of external restraints—such as recommendations or nominations from citizen groups, or consultation and approval from the legislative branch—to prevent an EIA commission from falling under the control of the administrative branch.

Secondly, as this article has previously noted, in systems that rely on the proponents of a particular project to produce the EIA documents for decision-makers, the objectivity of that information is questionable. To respond to the problem, commentators have suggested an approach modeled on the U.S. NEPA, which places the responsibility of preparing basic EIA documents on the agencies themselves, rather than project proponents. However, even systems in which agencies are responsible for preparing basic EIA information cannot completely protect the information from bias. Especially in cases where governments themselves are project proponents, agency staff or hired private consultants tasked to prepare basic EIA information still suffer from a lack of independence. Opportunities remain for scholars to devise strategies for increasing the reliability of EIA information.

C. Heightening Judicial Review

Thirdly, and most importantly, courts must play a more active role in the context of EIA. Although enhancing public participation and reinforcing expert governance would make a difference, the success of these factors largely depends on political processes themselves. However, because of political malfunction, it is unlikely that legislatures and agencies will make genuine reforms. As a result, any hope of meaningful improvement to EIA systems rests mainly on the judiciary, which can change its course autonomously. Where political processes have failed, courts should more intrusively review EIA judgments and development decisions. In other words, courts should apply strict scrutiny rather than deferential tests.

Unfortunately, academic commentators and judges often overemphasize the fact that EIA involves complex science, technology, and planning factors, and they tend to advocate or adopt a deferential attitude toward agency decisions. After recognizing the effects of political malfunction in environmental contexts, scholars should advocate for judicial review that takes a closer look at EIA processes and judgments. Especially where the expertise gap does not really impede judicial decision-making, courts should courageously substitute their judgments for those

180. Squillace, supra note 79, at 117; Jeffery, supra note 1, at 463–64.
181. Jeffery, supra note 1, at 464. See also Davis, supra note 67, at 53–54.
of agencies.\textsuperscript{182} Efforts should also be made to formulate more precise standards of review.\textsuperscript{183}

Courts also have a critical role to play by temporarily halting construction of projects approved through inadequate EIA. Even if the court eventually invalidates an EIA decision, unless construction was halted during the litigation process the damage caused by development is already done.\textsuperscript{184} This scenario profoundly contradicts the nature of EIA, which requires agencies to consider the potential environmental effects of their proposed actions \textit{in advance}. Any new EIA process that begins after a court revokes the original EIA decision becomes more of a rubber stamp for the project that is already underway. Worse, agencies may try their best to create “accomplished facts” before the legal processes are complete.\textsuperscript{185} Because the invalidation of EIA decisions does not affect past developmental activities, the optimal strategy for the agencies that have decided in favor of projects is to pass EIAs rashly and allow development to progress quickly. Temporary injunctions are a capable mechanism to redress this problem, but their effectiveness depends on how much courts are willing to question and call a halt to developmental decisions. After recognizing the devastating effects of agencies’ biases, reviving the functionality of EIA clearly requires courts to grant injunctions more proactively. Courts should more seriously account for interests that may be lost after construction, and be more skeptical of agencies that appear to be undermining the substance of EIA.

Nevertheless, this article by no means argues that courts should always apply strict review in EIA cases. EIA affairs should be a category that triggers heightened judicial scrutiny “on principle.” Courts may then consider the existence of certain factors to adjust the level of scrutiny downward. The first factor concerns the extent and prominence of minoritarian bias in specific contexts. Although environmental affairs in-

\textsuperscript{182} For example, can courts specifically order agencies to prepare EIIs where agencies have decided not to? In the United States, while some courts are conservative in this matter, others have done so. See, e.g., Sierra Club v. Marsh, 769 F.2d 868 (1st Cir. 1985); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998); Nat’l Parks & Conservation Ass’n v. Babbitt, 241 F.3d 722 (9th Cir. 2001); Friends of the Earth, Inc. v. U.S. Army Corps of Engineers, 109 F.Supp. 2d 30 (D.D.C., 2000); Ocean Advocates v. U.S. Army Corps of Engineers, 402 F.3d 846 (9th Cir. 2005).

\textsuperscript{183} For some subject matter and tests of NEPA judicial review that have been identified, see Daniel R. Mandelker, \textit{NEPA LAW AND LITIGATION}, at ch.8–ch.10 (2011); Peter S. Knapman, Comment, \textit{A Suggested Framework for Judicial Review of Challenges to the Adequacy of an Environmental Impact Statement Prepared under the Hawaii Environmental Policy Act}, 18 \textit{U. HAW. L. REV.} 719, 734–62 (1996).

\textsuperscript{184} The cases of the Central Taiwan Science Park Phase 3 and the Beautiful Bay Resort are good examples.

\textsuperscript{185} The rapid transplantation of the trees in the Taipei Dome case is a good example.
herently tends to attract minoritarian bias, there are exceptions. For example, some public infrastructure projects might purely serve the public interest and do not involve concentrated interest groups. Therefore, courts should be somewhat sensitive to context and consider lowering scrutiny in cases like these, when appropriate. The second factor is the strength of the other mechanisms that may help diminish the power of minoritarian bias. For example, public participation and expert governance in EIA also have a balancing effect on minoritarian bias. Although the previous discussion indicates that effective legislative or administrative actions for diminishing minoritarian bias are unlikely to occur, those actions, especially legislation, are not completely impossible.186 If the mechanisms of public participation and expert governance are sufficiently enhanced and substantially suppress political malfunction in practice, the need for strict judicial review declines. Courts should be somewhat sensitive to EIA designs and their practical effects. When other mechanisms function effectively in responding to political malfunction, courts should show more self-restraint.

These three potential responses are dynamically related. Ideally, they fight against minoritarian bias collectively to reach a proper balance. In reality, each of them is fluctuant. The role of the judiciary is central, not only because courts suffer less minoritarian bias and malfunction, but also because courts may prompt legislative or administrative actions improving public participation and expert governance through active judicial review and guidance.

CONCLUSION

In demonstrating the validity of this theoretical analysis, this article has focused on the EIA system in Taiwan. When focusing on another country, studies certainly should take into account the social, economic, and political factors that vary among countries, such as the strength of environmental NGOs, the environmental and civic awareness of the general public, and the respect of agencies for the rule of law. Yet, since this article’s analysis was grounded in the theoretical exploration of the operation of judicial and political processes, the insights offered should apply to EIA law and jurisprudence in all countries that feature independent judiciaries and democratically-elected, constitutional governments.

This article has argued that the best way to help EIA systems infuse sustainability into government decision-making is by increasing public participation in the EIA process, enhancing the degree to which unbiased experts are involved in the decision-making, and encouraging

186. See Sinden, supra note 59, at 1447–48.
courts to take an active role in supervising the adequacy of the EIA process. The biggest threat to sustainability in decision-making is minoritarian bias, which results from the highly disproportionate representation of the private interests of developmental groups in political processes, as opposed to the interests of the general public and future generations. Against this backdrop, the rise of EIA can be understood as an attempt to fight against that failure of political processes. The mechanism of public participation represents an effort to make administrative processes more transparent and take into account more opinions that represent public interests and, therefore, improve the administrative processes themselves. The mechanism of expert governance represents an effort to introduce a new decision-making element that grounds judgments on expertise. It can be used to remodel administrative processes and make decisions based more on professional analysis than on the preferences of political power. In reality, however, public participation and expert governance may not have been sufficiently incorporated into EIA systems. And even if legislation has crafted sound mechanisms of public participation and expert governance, agencies might still find ways to undermine their implementation through procedural or technical maneuvers. This is why the judiciary has such an important role to play. Courts are good at resisting undue political influence and considering long-term interests, and should play an active role in EIA. Therefore, where minoritarian bias remains prominent in EIA proceedings, courts should strictly review, rather than submissively defer to, EIA judgments and developmental decisions.