Utilizing Environmental Impact Assessment of Policy to Assist in Policy Making
- Taiwan Offshore Wind Power Zone Development Policy As an Example

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Abstract

The purpose of assessing the environmental impact of the government's policy is to urge the national competent authorities overseeing business objectives and policy research to take environmental factors into consideration during policy research and decision making. These factors can be used as the reference criteria for examining the environmental impact assessment (EIA) of development activities in order to increase feasibility of policy execution and social acceptance.

Currently, Taiwan has set policies for the following items to undergo EIAs, including the industrial sector, the mining industry, water resources development, land use, energy, animal husbandry, traffic, waste disposal, and disposal of nuclear radioactive waste. Taiwan also drew up the "Guidelines for the Operation of Government Policy Assessment Instructions," regulating that the policy research and development agency conducting policy EIA should include policy background and content, analysis of alternative schemes, assessment of possible environmental impacts caused by policies, and countermeasures for mitigating or avoiding environmental impacts. It also clearly evaluated the impact of policies on environmental receptors item by item in a matrix table, and divided the scope of the assessment into regional, national and global.

Take Taiwan's offshore wind power zone development policy as an example, the Bureau of Energy researched and proposed an Offshore Wind Power Zone Development Policy Assessment Statement in 2015. The Environmental Protection Administration of the Executive Yuan (EPA) called together the members of the EIA review committee, specialists, scholars and related authorities to convene for discussion, and sort out general environmental issues as well as their corresponding measures. The results were put into a consultation paper provided to the Bureau of Energy and development authorities as a reference for subsequent planning.

According to Taiwan's current laws and regulations, the central competent authorities in

charge of relevant industries are not yet required to carry out EIA for significant policies, and because current EIA in Taiwan is for consultation and not mandatory, the willingness to actually implement policy EIA is low. Therefore, the Environmental Protection Administration (EPA) in 2017 started to consider revising the Environmental Impact Assessment Act by stipulating the policy EIA in a special chapter to strengthen its functional mechanism and link with case EIA. If case development conforms to EIA policy already implemented, the procedure of EIA review, under certain conditions, should be simplified to improve the incentives of policy EIA and to prevent and mitigate the adverse effects of the policy or case development on the environment and achieve the goal of environmental protection.

The Main Text

The purpose of assessing the environmental impact of the government's policy is to urge the national competent authorities overseeing business objectives and policy research to take environmental factors into consideration during policy research and decision making. These factors can be used as the reference criteria for the examination committee of environmental impact assessment (EIA) under the Environmental Protection Administration of the Executive Yuan (hereinafter abbreviated as “EPA”) to examine development activities.

Currently, Taiwan has set policies for the following items to undergo EIAs, including the industrial sector, the mining industry, water resources development, land use, energy, animal husbandry, traffic, waste disposal, and disposal of nuclear radioactive waste. The flow chart of assessing the environmental impact of the government's policy is as appendix A.

In addition, the EPA in 1998 lay down the "Guidelines for the Operation of Government Policy Assessment Instructions," regulating that policy research and development agency conducting policy EIA should include the following content:

1. Policy background and content: including "assessment of the implementation of the original policy and environmental load analysis," "analysis of correlation with national environmental protection policy," "demand and supply management of resources," and "environmental protection objectives set by the policy," depending on the nature of the policy

2. Analysis of alternative schemes: the comparative analysis of various schemes planned to achieve policy objectives, which should take into account environmental, economic and social factors, select more feasible or better schemes, and explain the selected results in accordance with various orientations.

3. Assessment of environmental impacts caused by policies: assessment items should include "the environment's assimilative capacity," "natural ecology and landscape," "national health and safety," "utilization of land resources," "water resources system and use," "cultural heritage," "international environmental regulations" and "social economy."

4. Countermeasures to mitigate or avoid environmental impacts: including "total quantity control strategy," "resource allocation," "resource restoration," "development location planning," "environmental management," "environmental monitoring," and "tracking assessment," depending on the nature of the policy.

When conducting the policy evaluation, the policy research and development agency shall clearly evaluate the impact of the policy on each environmental receptor item by item in the matrix table. The scope of the evaluation can be divided into regional, national and global. The matrix table of the policy evaluation is as appendix B.

With respect to the government policies proposed by the policy research authorities, the EPA called together the members of the environmental impact assessment review committee, specialists, scholars and related authorities to convene for discussion, and sort out generic environmental issues as well as their corresponding measures. The results were put into a consultation paper provided to the policy research authorities and development authorities as a reference for subsequent planning to facilitate the guidance of predominant policies. As far as the governing authorities promoting the policies and companies interested in investment activities are concerned, they can refer to the consultation paper for the EIA policies to get up to date with the execution of policies and the environmental impact issues regarding the investment in development activities. Common ground can be found with all interested parties in advance, thus increasing feasibility and public acceptance and helping to improve the investment environment in Taiwan.

Take Taiwan's offshore wind power zone development policy as an example, in order to meet the renewable energy policy and development target set for 2025, the Bureau of Energy researched and proposed an Offshore Wind Power Zone Development Policy Assessment Statement in 2015. The EPA called together the members of the EIA review committee, specialists, scholars and related authorities - including the Council of Agriculture of the Executive Yuan, Coast Guard Administration, Fisheries Agency, Maritime Port Bureau of the MOTC, Bureau of Cultural Heritage of the MOC, regional governments, and the governing authorities of environmental protection under the regional governments - to put together a consultation paper in 2016 and sort out generic environmental issues. These issues included development zones, Indo-Pacific humpback dolphins, bird protection, aquaculture,

decommissioning arrangements, and electric cable route arrangements. It also included their corresponding measures such as regulating that development should start from distant zones to closer zones, wind turbines must be positioned over 1,000 meters away from the critical habitats of wild Indo-Pacific humpback dolphins (and a pre-notice is required), a spacing of over 500 meters between each wind turbine is required for birds to avoid or get through the turbines, the construction period should avoid the fishing peak season, and anti-contamination cloth should be set around the perimeters of the construction during submarine cable installment. The Bureau of Energy can reference these results to mark out potential offshore wind fields, and the development authorities can plan the development of offshore wind power generation and apply for EIAs.

Afterwards, in 2017 the EPA examined the environmental impact statements of 22 cases of offshore wind power generation development. The examination process checked the conformity of each item in the consultation paper with EIA policies. The requests based on generic environmental issues were designated, and the examination was completed within 9 months. Nineteen cases passed the examination by a total device capacity of 10GW, which surpassed Taiwan's green energy target of 5.5GW set for 2025, exerting the function of EIA policies and demonstrating the efficiency of examining EIAs.

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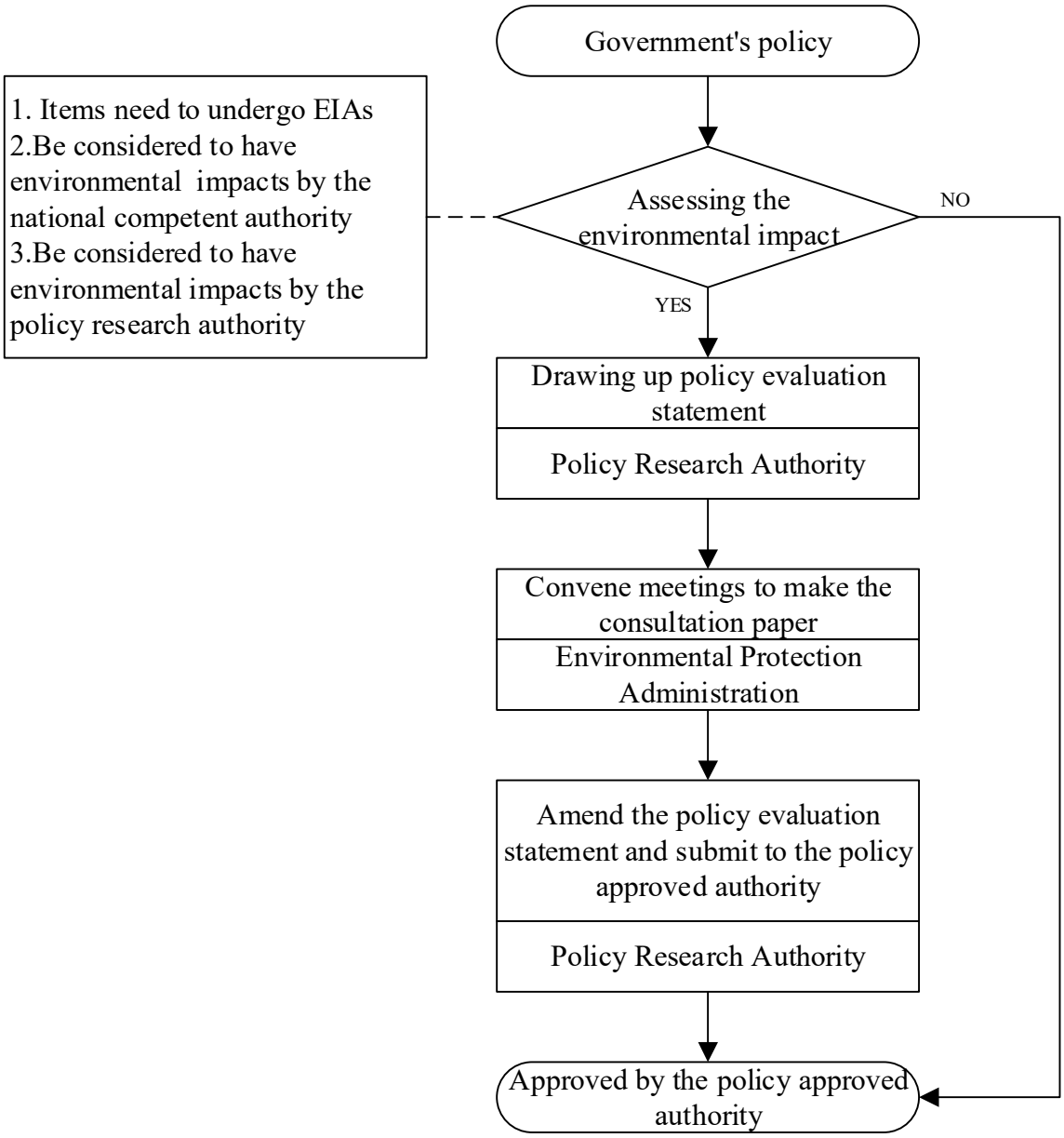
Appendix A


Government's policy
1. Items need to undergo EIAs
2.Be considered to have environmental impacts by the national competent authority
3.Be considered to have environmental impacts by the policy research authority
Assessing the environmental impact
NO
YES
Drawing up policy evaluation statement
Policy Research Authority
Convene meetings to make the consultation paper
Environmental Protection Administration
Amend the policy evaluation statement and submit to the policy approved authority
Policy Research Authority
Approved by the policy approved authority

Appendix B

	Policy assessment items and contents	Regional	National	Global	Countermeasures	Assessment	Remark
		Assessment					
1.The environment's assimilative capacity	Air, water, soil, waste disposal, noise, non-ionizing radiation						
2. Natural ecology and landscape	Terrestrial ecology, aquatic ecology, natural ecological landscape and habitat						
3. National health and safety	Transmission of toxic or harmful substances, leakage risk of ionizing radiation, chemical leakage risk						
4. Utilization of land resources	Area and quantity of land resources, mineral resources, soil and rock resources, land use (modes and activities), geographic landscape						
5. Water resources system and use	Water target and distribution, water crowding-out effect and water resources						
6. Cultural heritage	Cultural heritage						
7. International environmental regulations	Montreal Protocol, UN Framework Convention on Climate						

	Policy assessment items and contents	Regional	National	Global	Countermeasures	Assessment	Remark
		Assessment					
	Change, Basel Convention, Washington Convention, Convention on Biological Diversity, Ramsar Convention, Stockholm Convention, Rotterdam Convention						
8. Social economy	Population and industry, transportation, energy use, economic benefits, public facilities and community development, public opinions and social acceptance						
9. Other							