Moving A Step Forward:

The Contribution of Strategic Environmental Assessment to the Development of Healthy Public Policy in the Energy Sector in Thailand

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1. Abstract

The development of Health Impact Assessment (HIA) in Thai society has its clear aim for creating Healthy Public Policy. The main framework for HIA development has been developed and applied to various policy and planning processes. At present, there are six Policy Themes that HIA has been working on and around 25 HIA projects have been completed.

In 2001, the reform of the Environmental Impact Assessment (EIA) System was initiated by the Ministry of Natural Resources and Environment. This has led to a number of critical issues for Thai society to be discussed and designed. The impact assessment at strategic level is among the important issues since the existing EIA system is limited to the project level only.

Consequently, the concept of SEA was formally introduced to several stakeholders, who work related to policy process. Since HIA in Thailand has developed to be applied to policy, plan, program, and project, one important issue at stake is the integration of SEA and HIA, or to put it more precisely, the contribution of SEA to the development of HIA for Healthy Public Policy.

This paper will synthesize the main concept of SEA as well as the experiences of SEA development in selected countries. Then, it will be used to examine the HIA development in Thailand. The main objective is to identify and detail the 'areas' that need more focus in HIA development.

Moreover, the HIA Policy Theme on Industrial and Energy Development will be analyzed in more details and some specific HIA cases will be used to demonstrate the importance, the potential benefits, and the obstacles of applying SEA in Thai context.

Key Words: Health Impact Assessment, Strategic Environmental Assessment, Public Policy

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2. Introduction

The development of Health Impact Assessment (HIA) in Thailand has its aim of pursuing the Healthy Public Policy. But in practice, the HIA development has transformed the focuses and priorities from public screening process at the project level to the broader decision-making and public policy process.

The conceptual framework for participating in public policy process has been developed, while taking into account the context, opportunities, and limitations of Thai society. Accordingly, the operational structure was improved and also new activities were initiated, particularly public communication and civil society empowerment.

However, there are many points to be improved or strengthened if the HIA development would have more effective impacts and consequences on the public policy processes.

Among various assessment tools, Strategic Environmental Assessment clearly focuses on policy, planning, or other strategic decisions with the prime aim not to 'mitigate the impacts' but instead, 'seeking for more opportunities' to promote sustainable development at these strategic levels of decision-making.

As a result, SEA concept has been introduced to the key stakeholders in Thailand and is being applied and put forward in both the Reform of the EIA system and the development of HIA. This paper deals with the issues and details of the latter to share the ideas and perspectives on applying SEA for Healthy Public Policy in Thailand. The energy policy is chosen to be the focus of this paper.

The paper comprises of two main parts. The first part will consider the HIA works from the beginning to reflect the gaps and needs for more effective participation in the policy and decision-making process at the strategic level. Then, in the second part, Strategic Environmental Assessment will be explained, and the discussion on the applying of SEA to the public policy process in the Thai energy sector will be shared. This will be followed by the practical pathway of applying SEA for Healthy Public Policy in the Thai energy sector.

Part I *The HIA Experiences in Thailand*

This part will look into the problems of the Thai energy sector and the experiences of Health Impact Assessment in the energy sector. The challenges for pursuing Healthy Public Policy in the energy sector would be identified and explained in the last topic.

3. The Energy Sector and the Energy Policy

The development of the energy sector in Thailand has been closely linked with the economic development of the country. Economic growth has always been the key factors for energy policy. But the other development concepts also played central role in different periods. Western Modernization had been the decisive policy driving force in the past; while Liberalization and National Competitiveness are among the top priorities for energy policy formulation at present.

Accordingly, the energy development in Thailand has been clearly focused on centralized system and conventional fuel, namely coal, oil, gas, and hydro. There are many large energy projects around the country. Even though, the system has provided rather reliable energy to fuel the economic growth, the negative impacts are significant in various aspects and levels, from local pollutions and community conflicts to ecological degradation and national economic burdens.

Box 1: Examples of the negative impacts from large energy projects

- The sulphur dioxide from the Mae Moh Lignite Mine and Power Plant has caused severe impacts on local livelihood and their farming for almost a decade. Even though, the mitigation measures for the gases problem were installed later on, the problems still occurred sometime. Currently, the debate is about the re-location of thousands of local people to new area.
- Pak Mun Hydroelectric Dam is another controversial case. Tens of thousands local people have depended their livelihood on the fish in the Mun river for centuries. So when the dam has blocked the flow of the river and the migration of fish in 1995, considerable impacts on local people's life are unavoidable. The conflicts have been going on until the present. (Amornsakchai et al., 2000) On the economic aspect, it has been found that the core benefit of the project on serving power demand is only one-third compared to the planned generation, while the total financial cost is almost double. Moreover, some key negative impacts had never been taken into consideration in the decision-making process.

The decision-making

Despite all these impacts, the government still continues with the same policy direction. The need to meet the energy demand growth and ensuring the 'suitable' energy cost are always the reasons of 'national interests' for the energy investments and expansion.

This is a result of the characteristic of the energy policy process, which can be described as 'Centralized sectoral policy and planning'. Even though, energy is related to many other issues, the energy policy has been formulated solely for energy supply security and low energy cost. The other priorities of the society have received very low attention in the strategic level of the energy policy process, particularly natural resources management, health protection and promotion, as well as technological innovation and sustainable agriculture.

Concerning the decision-making process, the government and the authority have formulated the policy and made decisions by themselves with participation, to a certain extent, of some stakeholders from the business sector. The newly established Ministry of Energy is clearly responsible for the energy policy and regulation. But the energy utilities have enormous power to influence the policy and decision-making process, not only in term of political and technical, but also financial and institutional aspect.

This is particularly the case of the power sector. The going-to-be-privatized Electricity Generating Authority of Thailand (EGAT) has decisive power on the policy process, system planning and regulation, project development and operation, as well as tariff setting. But for the other stakeholders and actors, specifically the local people in the project sites or the broader civil society, they can hardly participate in the policy or decision-making process. The existing channels do not provide any opportunities or processes for their evidences and knowledge to access or influence the strategic decision-making.

These have led to several unsuitable investments as in the case of Pak Mun Dam and also the Thai-Burmese Gas Pipeline. Thailand had to pay several billions Baht before the actual gas receiving due to the take-or-pay contract. In addition, referring to the Prime Minister, "the false and errors of planning for power development by the Electricity Generating Authority of Thailand has been resulted in over investment for the amount of 400 billion Baht (about ten billion US dollar).

Furthermore, the present government is one of the most powerful ever in Thailand. The political party of the Prime Minister has won big majority in the general election. Then, with the strong leadership, connections, and networks, he has expanded his control and power to many parts of the society, to name just a few, the cabinet, the bureaucrats, the army, the senate, as well as some large businesses and media. Therefore, they have even stronger decisive power over the policy and decision-making processes.

Project development and current situation

Thus, several new projects, particularly the power plants and natural gas pipelines, have been planned and implemented with different progresses. These projects have posed high risk of environmental, social, health, as well as economic impacts, on the local communities and the whole society as well.

For the impact assessment side, the EIA system is in place, but unfortunately, it focuses on technical data and evidences and therefore, the local information and knowledge is not

included. Also, it is implemented at the project level, which is late in the policy process as many decisions have been made already and hence, very little room for changes or adjustments.

Consequently, the projects have faced with strong oppositions from the local communities but the government always confirms and defends the well-planned solution for 'the national benefits'. All the times, the mass media has been used as a influential channel for informing and convincing the public for the necessities and the benefits of the project. While the other stakeholders, especially the local people and civil society, has so many limitations. They can hardly access to the important information, especially those of the energy utilities. Alternative information and analysis are usually rare because of the power of the government as well as the capacity of the society.

Apparently, in several cases, these have led to severe conflicts, deadlocks and violence. Cases after cases, this has sadly reinforced mistrust in Thai society between the government and the people.

Alternatives: high potential, low attention, and no action

Apart from the mainstream energy development, renewable energy and energy efficiency and conservation have been developed also in Thailand. Both have promising potential for the development of sustainable energy future. Biomass represents one of the most important opportunities for Thailand as the potential of the agricultural sector and also the agro-industries are huge. Moreover, biomass can provide energy for power generation, industrial heat, household utilization, and transportation as well. Many of the technologies are already feasible and cost-competitive.

Solar, wind, and micro hydro also have certain potential for fulfilling the energy needs. In addition, energy efficiency and conservation is very important in dealing with the demand side. Some successful measures and programs are already witnessed in Thai society. The urgent need is to put forward the comprehensive policy, measure, and regulation at the strategic level.

Despite of the high potentials, the development of these alternatives has had many difficulties. Some of the apparent obstacles include the low price paid to renewable energy, the inappropriate regulations of the purchase agreement as well as the general regulations of the energy sector.

However, if we consider these obstacles in more details, they are set up on the criteria that favor centralized conventional energy system. Obviously, this obstructs the development of decentralized energy and energy saving as well. Furthermore, many rationales and believes in the energy sector have strengthen and supported the existing expansion. These are, for instance, economic growth must needs energy growth, economies of scale, centralization is needed for the security of energy supply, energy is technical issue, etc.

At present, the government announced the new energy policy for strengthen national competitiveness. The economic growth comparing with energy growth will be reduced from 1:1.4 to 1:1 and the share of renewable energy will increase from 0.5 percent to 8 percent within 2001. There are a number of measures, such as, renewable energy portfolio, providing incentives, and support the research and development.

But the policy implementation is clearly the critical point. From table 1, it is clear that the new policy direction and measures are not realized in the system planning and operation yet.

Table 1 Comparison between (a) Government Policy and Target for Renewable Energy Development and (b) EGAT Power Development Plan and Policy Suggestions

Government Target and Policy for Renewable Energy Development	***EGAT Power Development Plan 2003 and Utilities' Policy Suggestions***
1. Slogan or Cognitive Framework "*One Tambol One Megawatt*" for Distributed power generation	1. Slogan or Cognitive Framework "*EGAT = National Champion*" for future ASEAN Power Grid Market
2. Renewable Energy Target of 2,410 MW in 2011	2. No Target for renewable energy
3. New renewable energy Capacity of 1,840 MW in 2011	3. Only 562 MW purchasing from renewable energy power producers in 2016[1] and EGAT also suggest to postpone to sign 300-400 MW buying contract for electricity from renewable energy till 2010[2]
4. Required 4% Renewable Portfolio Standard (RES) for new power plants, equal to 400 MW	4. Not included in Power Development Plan 2003, but if 13,060 MW of new power plants required 4% RES, it would be equal to 522 MW

Source 1. EGAT, 2003. Power Development Plan 2003.

2. EGAT, 2003. The Management of Power System for Thai People.

4. HIA Works in the Energy Sector

Previously, health problems were perceived by the public only for 'illness' and 'doctor'. But since the national health system reform was launched in 2000, the definition of health has been redefined as "a state of well-being in four aspects: physical, mental, social, and spiritual".

The mission of HIA development is to work on health issues in non-health policy to achieve the main goal of healthy public policy. Or in the other word, HIA is created *"to mediate between all stakeholders of any public policy, so that they can work together for a healthier society based on sound evidence"* (Phoolcharoen et al., 2003). Consequently, HIA development has been regarded as a meaningful supporting force for the whole movement of the reform.

Considering the situation and problems in the energy sector, HIA development in the beginning period (around 2001-2002) was started from evidence-base analysis as a process of social empowerment and mobilization for 'putting health on the agenda'.

Knowledge building

Since, the demand and the urgent of the society are these 'hot and burning' cases, HIA was conducted in the selected cases. In these cases, the analysis from the holistic health perspective was always lack and HIA was used to fulfill the gap. The health information was collected and analyzed to provide the evidence-base analysis to influence the decision-making process, both at the project level and, in some cases, the related national policy.

These cases are, for example, the case of Lam Ta Khong Pumping Storage Power Plant to support the national EIA system reform and renewable energy development policy and subsidy measure in the case of Biomass power plant project.

Social learning process

In each case, HIA has build knowledge by interaction with the local people and other stakeholders. Participation of various stakeholders, especially the civil society sector, has been a core focus and this has become a core characteristic of the HIA development.

The aims are to enhance the collective learning process of the society as well as providing opportunities for social empowerment. In practice, meetings, workshops and public forums were arranged in each case to share and discuss the knowledge with other stakeholders.

On the alternative energy side, HIA development in the energy sector chose to lay the firm ground by producing synthesizing documents specifically for the National Health Assembly, the main public policy arena of the National Health System Reform, along with many articles for public understanding.

The main issue emphasizes that the main obstacles to the development of renewable energy and energy efficiency and conservation are not the issues of un-mature technology or high costs. Actually, the rationale of energy development, the existing policy and planning process, and the institutional structure are considerably more important for the alternatives to be developed and commercialized.

Decision-making process

Due to the characteristic of the energy policy and decision-making process as explained in the first heading, all HIA has to work under the centralized process that would always defend each energy projects as the best solution for 'the national interests'. So these projects cannot be decommissioned, changed or modified significantly.

All HIA works have seriously taken into consideration the policy and/or decision-making process with the main aim to facilitate the collectively decision-making and leading to the healthy public policy. During the HIA studies process, it was designed to empower the local people and the civil society, so that they can participate more meaningfully in the public policy process. All the four cases, particularly the case of Wieng Hang Lignite Mine and the Pak Mun dam, had put a lot of efforts to this.

Furthermore, the HIA works have also focused on resource mobilization, not only in term of financial but the more important are knowledge, networks, and collective actions. This aims to strengthen the movement for healthy public policy.

Even though, the HIA process could be very good and effective but this cannot guarantee the result of the decision-making. This is particularly the case of Pak Mun dam. (Please see the details in Box 2)

Box 2: The Pak Mun dam - Political abuse of academic rigor

Concerning the Pak Mun dam case, the local people was demanding the permanent opening of all dam's sluice gates because of the permanent negative impacts on their livelihood. This led to the decision by the government to open all dam's sluice gates for sixteen months to conduct the comprehensive study on the impacts of the dam and the options for the future.

Apart from the study mandated by the government, the Pak Mun people also decided to conduct their own 'Villager Research' on the fish and other natural resources as well as their own livelihood. It was believed to be the first ever comprehensive research on local issues by local people and for local people. HIA was the third research conducted to provide the comprehensive health impacts of the dam from the holistic health perspective. HIA was carried out in close cooperation with the local stakeholders.

Despite all these research, the decision was made with the other set of information. The Prime Minister mandated the National Statistic Office to do the opinion survey for three days. Then, he used the survey as the main reason for the decision to open the dam's gates four months a year during the rainy season. This was exactly the same practice as before since the dam has always opened all of the gates during the rainy season every year from the start of the operation.

In the on-going case of the Lignite Mine and the Pumping Storage Power Plant, HIA works can contribute to both evidence-base analysis and social empowerment and mobilization, however, the energy utility, who is responsible for the two projects, still defend the necessity and benefits of the projects.

Concerning the last case of biomass power plant projects, the project owner is just a medium business firm, interesting to invest in renewable energy. This has several differences to the other cases. The project proponent is not so powerful compared with the energy utility. Also, the government and the authority have not had strong interests in renewable energy project. Hence, one project was cancelled by the developer themselves, while another project was not approved for the governmental subsidy.

In 2003, the HIA works on the energy sector was focus more on the energy policy directly. The energy analysis for three regions was produced following the demand from the Regional Health Assembly on the energy issues. The key data was disseminated and the issues were taken to the National Health Assembly under the theme 'Healthy Public Policy'.

However, this channel still cannot influence the energy policy effectively due to the problems, including social understanding on the energy issues and the lack of continuous movement.

5. Reflection on HIA Outcomes and Challenges

From the experiences, HIA can address the urgent problems and needs in many cases. The introduction of 'health' issues can lead to new discussions and forums where many stakeholders can participate and contribute to. HIA has been recognized as the comprehensive assessment, where various evidences and opinions are taken to the analysis and discussion, especially the local knowledge and their concerns.

The level in the decision-making cycle

Because of the need in the society, HIA in the energy sector was unintentionally focused on the project level. Consequently, the outcomes are mainly linked to the project level. Although, HIA can participate and influence the decision-making process in some cases; the results are still limited and not effective since 'building-up from project level to the policy level' cannot accommodate all other issues at the strategic level.

In some other cases, the HIA can influence only to a small extent and, in some specific process, could not enter to the decision making process because the proponents and/or the authorities totally closed the whole process.

Involving key actors

Another critical problem is involving key stakeholders to the HIA process as well as the policy process. Firstly, some stakeholders are not identified to be relevant. But after knowing that, the ways to approach and convince the identified stakeholder to participate are not clear. Thus, in some cases, it has been done in the reactive way of open for the others to come in, but not in the proactive way of approaching and convincing. This is particularly in the case of the stakeholders from the government and the private sector. Therefore, the more strategic and systematic approach is needed for effective participation of all key actors.

Furthermore, approaching and convincing can be done in the form of capacity-building and empowerment. This can be designed and implemented specifically for each group of the key stakeholders. A clear need is the case of civil society actors, who have been marginalized and have very limited opportunities or channels to participate in the policy process. But capacity-building can be a good strategy for approaching and convincing political actors, such as high level officials or ministers.

Lack of progress on policy proposal

Moreover, HIA has not focus enough on policy options. The alternatives have been considered and discussed but there are many other issues surrounding the project, which need urgent attention and consideration. Also, the alternatives analysis cannot be comprehensive as there is no point proposing and discussing the alternatives that are already impossible because of the irreversible decisions already taken before the project level.

There is clearly the need for a comprehensive assessment of alternatives and policy options, which should lead to the clear and concrete policy proposal for mobilizing the civil society, influencing the policy process, as well as communicating with the public.

Power inequalities in the policy process

Based on the four cases, explained in heading two, it shows that the decision is highly influenced by the political agenda and the power of the organizations. This has shadowed the importance of the knowledge-base decision-making, specifically the benefits, costs, and impacts of the project. Therefore, the HIA development cannot limit its focus on the project or case study level, but it needs to take into consideration the political agenda and process in the more strategic level.

This leads to the critical issue of power inequalities in the Thai energy sector. The Ministry of Energy is the key authority and thus, the minister is clearly the key person. However, the energy utilities have strong position and also many channels to influence the policy process. They are strong not only in term of politically and institutionally but also technically and financially.

They obviously exercise their decisive power on the decision-making process. But there are two more levels that worth the consideration and analysis. Firstly, the framework and scope of the decision-making process have been decided before the whole process gets start. So, the power to decide really set up the basis of decision-making as well as essentially influences all results.

The other level is the power to manipulate the desires, thoughts, and the believe system for the energy sector, which can be regarded as the deepest exercise of power. As witnessed in the energy sector, the quest for sustainable energy future would have to deal with this level of power also.

These issues have drawn our attention to the knowledge of participating and influencing the policy process or more specifically, the decision-making process at the strategic level.

Part II *Developing SEA for Healthy Public Policy in the energy sector in Thailand*

This part will explain the concept and key issues of Strategic Environmental Assessment. The context of the Thai energy sector will be discussed to provide clearer and on-the-ground obstacles and opportunities for applying SEA. Then, the aims and purposes, as well as the principles and applications of SEA for Healthy Public Policy in the energy sector will be presented.

6. Strategic Environmental Assessment

Various tools for environmental assessment or impact assessment are different to each other primarily in term of the aspects of impact it focused on, to name just a few, environment, social, cumulative, or risk assessment. But Strategic Environmental Assessment (SEA) shares distinctive aspects.

SEA is an environmental assessment tool that has been developed for applying to strategic levels of decision-making, such as, policy, planning, and program level.

Instead of applying to the project level, the idea of SEA is applying the assessment tool at the earlier stages of the decision-making cycle when all of the potential options or alternatives can be considered. This is a very vital issue because the consideration of options at the project level, which is at the end of the decision-making cycle, is very limited since many decisions have been made already. (Partidario, 2003)

At the strategic level, mitigating impacts is not the crucial issue, not like at the project level. Instead, SEA aims to search for more opportunities to promote sustainable development at the strategic level by assessing impacts from different options.

While the other tools deal with symptoms of environmental degradation by focusing on standard agenda, SEA gets at sources of environmental problems and therefore, would be able to focus on sustainability agenda.

SEA and sustainability

The word “strategy” in SEA implies visions that look beyond existing facts. It identifies a roadmap or possible pathway that enables achieving the set of objectives within the long-term timeframe. SEA is also a flexible process that enables reviewing, and altering of objectives and pathways to reflect changing social, economic, and political circumstances.

By emphasizing on possible options to achieve environmental objectives and sustainability agendas rather than just environmental standards, SEA can facilitate, influence, and improve strategic decision-making. SEA also enables tiering of environmentally structured actions from policy to project level. (Partidario, 2003)

SEA Processes

Because a core aim of SEA is to improve the decision-making, it is very essential to firstly consider the decision-making process when initiating an SEA. This is to adapt and fit SEA to the process appropriately. There are five key elements in an SEA process. This is adapted from (Lund and Sukkumnoed, 2004)

1) Vision: sustainability framework of each case must be reviewed and this would lead to a shared set of objectives, targets, and indicators, which will be used through the SEA process.

2) Options: SEA aims to search for opportunities and facilitate the identification of development options as well as alternative proposals that are more suitable. Therefore, different policy options to achieve the sustainability frameworks have to be reviewed, analyzed, discussed, and developed in transparent and participatory manner.

3) Analysis or Appraisal: At this stage, the scope of the sustainability assessment has to be clearly defined for all stakeholders. The appraisals of alternatives and policy options should be done in the participatory manner with independent and public review. This would ensure the good quality of the outcomes according to the sustainability frameworks, objectives, and indicators.

4) Actions: Actions is needed to facilitate the decision-making process by providing the necessary information and outcomes, at the right time, and in an appropriate format. Action also requires the determination of the chain of the events and the institutional frameworks necessary to promote sustainable solution in practice. It is important to establish targets, indicators, and process for follow-up and evaluation of proposed policy actions.

5) Participation: Throughout the decision-making process, SEA has to inform and involve all stakeholders, from interested and affected public to various government bodies. It has to explicitly address their inputs and concerns in SEA documentation as well as the decision-making. To facilitate the meaningful participation, SEA has to provide clear process for all stakeholders to know the information requirements, and also ensure sufficient access to all relevant information.

7. Aims and Purposes for Applying SEA

From the situation and problems of the energy sector, the need for the incorporation of sustainability agenda to energy development is obvious as it is clear that the impacts of the existing energy sector are considerable. Moreover, the alternatives and options at strategic level have not been considered comprehensively and innovatively, even though they represent promising potential for sustainable energy future. More importantly, the existing policy and decision-making process in the energy sector has led to many experiences of conflicts and mistrust in the society.

SEA has to create the opportunities and facilitate all parts of Thai society to share and discuss on these issues at strategic levels, and push for actions on promoting sustainable solutions in practice. This would create the social capabilities and the positive consequences on the problems of power inequalities, and hopefully, it would lead to the emerging of the consensus mode of decision-making.

8. Principles and Applications of SEA for Healthy Public Policy in the Energy Sector

At the vision level, the sustainability framework for the energy sector will be reviewed and discussed among all actors to reach the shared set of strategic objectives. This is an important opportunity for Thai society since generally, the sustainability framework and objective are taken for grant and hence, they are rarely discussed.

By set up the shared framework and objectives for a more sustainable future, it is clear that the energy policy and planning has to change from the single purpose process for the energy sector alone to intersectoral and multi-purpose policy and planning process.

Alternatives and options

Concerning alternatives and options, the existing energy regime is naturally against both renewable energy and energy efficiency and conservation, which are the important alternatives and policy options. These are reflected in numerous forms of the rights limitations, unfair rules and price, no supporting organizations, etc. Moreover, the public perception of high cost and not mature technology is always strengthened by the energy system proponents for more than a decade.

Therefore, rushing to conduct a comprehensive assessment may not be able to pursue the sustainable scenario as the key stakeholders and also the general public still do not understand and aware of the potentials, benefits, and feasibility of the alternatives.

In addition, the empowerment and mobilization of the civil society is important firstly to put pressure and open up the policy process for the comprehensive and effective SEA process. Secondly, it will ensure the active participation of various stakeholders in the SEA process, which is a fundamental requirement for effective SEA process.

Analysis and appraisal

SEA should produce a comprehensive assessment of visions, intentions, and strategic proposals of the future energy sector. The assessment has to compare a broad range of alternatives and policy options under the set of objectives and targets that are identified previously. Since the definition of health covers not only physical and mental aspects, but also social and spiritual health, it can be a good basis and ‘entry point’ for the assessment.

The result of the assessment should not focus on impacts and costs of each option. The more desirable and constructive outcome of the assessment should be the opportunities and pathways to achieve the sustainable future. Furthermore, pathways show how to reach by analyzing institutional structure and public regulation.

Furthermore, these pathways have to be economically feasible. Thus, the SEA has to be supplemented by the proper economic assessment. This means that the economic tool should not exclude any alternative options by its limited assumptions and short-term perspectives. The more desirable tools should be the economic assessment for innovation that has to also look beyond the existing facts and analyze the long-term perspectives and preferences in the innovative manner. (Lund and Sukkumnoed, 2003)

Interdisciplinary approach is needed for the SEA process with the aim of intersectoral and multipurpose policy oriented. But the experts and resource persons in other fields, such as agriculture, natural resources management, technological development and innovation, may not interesting in energy policy. Therefore, networking, public forum, as well as public communication would help to open the opportunity and strengthen the cooperation and co-working in the SEA process. This can also be initiated by intersectoral capacity building with problem oriented approach.

Involving key actors

As one of the most vital issue, involving key actors as well as public participation is very critical to the successful of an SEA. Especially for the Thai energy sector, these issues are even more important because of the differences in value, development direction, power, and resources among the stakeholders.

This also implies the suitable approach for each group of the stakeholders. For the civil society actors, the needs are more than engaging them, but also to mobilize and empower them so that they will realize and meaningfully participate in the SEA process. Concerning the other key stakeholders, informing and convincing should be the key approach.

The other important group is the decision-makers and the authorities. As the society has very little knowledge about the actual and on-going political process, it is a kind of black box for Thai society that obstructs the meaningful participation of all other stakeholders in the strategic level. (Sukkumnoed, 2003) Therefore, constructive dialogue seems to be the enviable tool and frequent interactions will ensure insight information and hopefully, leading to accumulated knowledge of the political stream.

However, all of these approaches must go along with effective public communication in order to keep the SEA process open and strengthen the learning process of the society as well.

It should be noted that mobilizing different sectors in the society has to be done continuously because the situation of the policy and decision-making process can change rather quickly and sometime, dramatically due to the power inequalities structure.

By creating clear understanding on the core of SEA and also the HIA and HPP, the meaningful cooperation between key stakeholders can be built up and this would help to solve the problem of ‘terminology ownership’ and also the confusion among numerous terminologies.

Open-up the policy and decision-making process

When looking at the energy policy process, it is clear that the centralized or ‘close’ policy and planning process is a big challenge for initiating an SEA. Also, the present government is even stronger and taking almost absolute controls on the whole bureaucratic affairs and the parliament processes. Therefore, SEA would needs both to convince the government by the potential benefits of applying SEA, as well as to mobilize the push from the society for starting the constructive process for strategic decision-making process.

Power disparities

In order to demystifying the abuses over the policy and decision-making process as well as enlighten the society to the more desirable process, SEA has to deal with all of the three dimensions of power imbalance, explained in heading five, and ensure that the thorough information and analysis will be produced and shared openly. Moreover, the participation of all key actors would ensure the right direction.

Conflict resolution

Conflicts in many energy projects, both the existing and the proposed projects, are one of the most critical problems in the energy sector given that these already lead to mistrust in the society. SEA process has a promising potential for conflict resolution. Therefore, the SEA core value of improving the decision-making, not stop it, must be strengthened. This is because the central focus in the conflict situation is on making decision or stops it. Thus, there is no room for compromise and consensus building. Furthermore, the whole SEA process must be open, communicative, and flexible to accommodate the diverse views, perspectives, and preferences of the involved actors.

9. Conclusion

Since the Research and Development Program on Healthy Public Policy and Health Impact Assessment is approaching the end of its first three-year phrase in September 2004, the development of SEA for Healthy Public Policy either in the energy sector or the other policy and decision-making processes, is among the crucial issues for the direction and actions of its second phrase.

The aims, principles, and applications of developing SEA for HPP are to be implemented and would need further discussion with the key actors about the practical processes for the SEA development in the Thai context.

Developing SEA should not be only another process of producing comprehensive assessment but does not have any impacts in the real world. The most challenging issue, instead, would be the establishment of the collective learning process at the strategic levels of decision-making for all parts of the society, so that they can all work together for healthier society.

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