

Executive Summary

This project aims to improve social acceptance of the electric power infrastructure in Thailand.

Main Argument

This study comprehensively evaluates issues related to public acceptance of coal-fired power plants in Thailand to derive policy implications on how to mitigate public protests and prevent movements that oppose coal power plants; and to achieve better public acceptance of any electric power infrastructure with potential risks. An intensive survey of the energy system and case studies of coal-fired power plants in Thailand has been conducted. Accumulated experience and knowledge in advanced European countries and in international organizations regarding the social acceptance and public involvement issues have been thoroughly reviewed.

Through the survey, the research identified five major factors behind the strong opposition to the construction of coal power plants in Thailand, especially in the southern part (e.g. Krabi, Suratthani, Thepa). These are:

1. Technical issue: emission of sulphur oxide, nitrogen oxides, dust;
2. Personal beliefs and prejudices: ‘coal is dirty’, ‘coal is dangerous’, etc.;
3. Political or business interests: e.g. movement leaders have political ambitions;
4. Role of religion: especially in regions with large religious groups;
5. Funding by international/local environmental organizations.

The political/business issues as well as the funding issues are the dominant factors and should, therefore, be carefully monitored. Specifically, in the following cases, strong protests could be especially incentivised:

1. Some local and national political leaders have businesses in renewable energies. Because of their positions in public offices, these political leaders have the power to push for funding for projects in their preferred energy sectors and, conversely, to stop coal projects so as to improve the environment for their businesses.
2. The competitors of coal power plants—namely, natural gas-fired power plants and biomass plants—are mostly operated by private investors in Thailand. It will be to their advantage if the Electricity Generation Authority of Thailand (EGAT), the body promoting coal-fired power plants (CPPs), could not develop new coal projects.

3. Certain key players in these protest movements join to create a name for themselves as part of their ambition to get themselves elected to public office.

Based on the results of this study as well as of the seminar on 26 June 2017 in Bangkok, four recommendations on how to improve the public's acceptance of coal power plants are proposed.

RECOMMENDATION 1: Enlighten people with correct and fair information and knowledge

It should be noted that not everyone is correctly informed and educated on coal power plants' engineering issues. Therefore, such must be addressed if the prejudices against coal are to be dispelled. Correct information disclosure and education would be the solution to the first factor behind protests (i.e. technical issues), and a partial solution to the second factor (i.e. personal beliefs and prejudices) mentioned above.

Some protests against CPPs either hone in on environmental concerns or fully neglect other important elements of an energy policy—i.e. the need to balance energy security, economic efficiency, and environmental sustainability. Therefore, this is where discourses that highlight the importance of balancing the essential elements and focus on the facts of the case are important.

The EGAT has already held large-scale public hearings and conferences, where participants were reported to have gained a better understanding of the scientific facts on coal power plants. These must, however, be further supplemented by nationwide symposiums, workshops, TV programs, and internet videos. While such efforts will hardly gain immediate or short-term results, continuing the public education campaign is a must as it is a precondition to improved public acceptance.

Also, holding a 'public open day' —i.e. opening the power facility to visitors—may be a good opportunity for people to learn about the actual state of CPPs, and consequently help elicit their trust. On the part of the CPP operator, this may be an opportunity to understand the locals' actual thoughts and sentiments and gain insights on how to better address the public's issues on CPPs.

RECOMMENDATION 2: Increase confidence in the CPP and its operator

To gain social acceptance, the CPP and its operator must first win the public's confidence. One way to achieve this is to apply internationally authorized/recognized guidelines on the design, construction, and operation of CPPs in Thailand. For instance, the Asia Pacific Economic

Cooperation (APEC) (where Thailand is a member) has developed the ‘APEC Guideline for Quality Electric Power Infrastructure’ in 2016, which suggests considerations and standards for power plants from planning to operation.

Because environmental concerns are the biggest reason for protests against CPPs, improving the environmental management mechanism can help gain public acceptance. This study suggests measures that are all meant to demonstrate the standard of construction and operation of a CPP in a transparent manner. These measures can be the following:

- Emission from CPPs must be continuously measured and such measured data transmitted to the local government in real time. Subsequently, the data must be opened to the public (for instance, via the local government’s website).

The Ministry of Environment must evaluate, grade and publish environmental management results on each CPP every year.

RECOMMENDATION 3: Provide financial and political incentives

While there are parties who fully understand the technical facts behind CPPs, they continue to protest because they either have politically motivated reasons or are swayed by international/local environmental organizations’ negative campaigns.

For concerns that are mainly for political or business reasons, an option is to provide financial benefits to locals within a specific geographical location. Such option has, in fact, been done for residents within 5 kilometres from a power station in Thailand. However, the protesting movements have reportedly expanded beyond the 5-kilometre radius. One can expect geographically wider acceptance if the area eligible for financial support is expanded, although it is clearly unsustainable to have a too-broad eligible area. In Japan, for instance, what its government has done is to define the area eligible for financial support based on the administrative district (e.g. city, town) where a power plant is located. Such definition can help get the support of local politicians since the financial benefit will be distributed to, for instance, their city as a whole.

Although the Japan model will incur bigger financial costs than Thailand’s existing 5-kilometre radius scheme, it may still be worth it to consider expanding the eligible area to cover an administrative district.

Another solution is to incentivize stakeholders who can positively contribute to a coal power project throughout the lifetime of the station—from planning, construction, license, operation,

and decommissioning. The following measures may potentially work as financial/political incentives:

- Call a meeting with interested parties during the planning stage and engage them in the development of plans for the operation of the power station. The aim is to allow the locals to take ownership over the success of the CPP project and realize the impact of such on their lives and economy. The key here is to get stakeholders involved during the earliest stages of the project as possible.
- Provide job opportunities for locals. Job creation (or employment) is always of interest to residents as well as politicians. Therefore, jobs with attractive packages (e.g. those that are long-term, offer appropriate pay, provide good family benefits) will be a major incentive to accept the CPP in the locality.
- Invite critical persons from international/domestic environmental organizations (who fund protest activities in Thailand) to public meetings to discuss financial support schemes—for example, subsidies for the installation of specific advanced technologies such as ultra supercritical-CPPs, so that they will change the focus of their funding from protest activities to promotional activities).

RECOMMENDATION 4: Strengthen role of the central government

The Thai government's role and leadership in the electric power industry should be reinforced. The Ministry of Energy—i.e. its Energy Policy and Planning Office—is responsible for planning and procuring the country's long-term energy, including electrical power. Meanwhile, there is no direct department or government agency within the MOE or other ministries that is responsible for looking after coal power plants. The sole national electric utility, EGAT, works as a conduit with the locals (instead of with governmental agencies) regarding protest movements against coal power plants.

Meanwhile, the central government, whose primary objective is to protect the nation's collective interests, can participate by setting the ground for constructive discussions. In particular, it can play a bigger role by holding dialogues with each municipal government, rather than direct talks with the residents. This way, municipal governments become strong supporters of the central government's program, while EGAT continues to improve CPP acceptance from residents since it already has direct communication lines with locals. For this approach, an integrated agency from several ministries of the government (e.g. Ministry of Energy, Ministry of Natural Resources and Environment, Ministry of Public Health, and Ministry of Education) must comprehensively manage the development of environment-friendly energy infrastructure.

RECOMMENDATION 5: Utilize international advocates

International non-governmental organizations count among the protesters against CPPs. In this case, international advocates can help deal with such organizations. Thailand is a member of the East Asia Summit and the Asia Pacific Economic Cooperation. Also, the International Energy Agency (IEA) is an example of a highly recognized international organization in the energy field. Thailand must lead discussions among such international organizations to form a consensus on the necessity of CPPs, and disseminate its stand to stakeholders inside/outside of Thailand through declarations, reports, and presentations. Although it may be impossible to eliminate dissenting voices, this tactic might at least be able to initiate more open and fair discussions on CPPs.