

Institutional Analysis for Government  
Organizations Involved in Policy Development  
and Implementation: A Case Study of  
Energy-from-Waste Targets in Thailand ' s 2015  
Alternative Energy Development Plan

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## 論文内容の要旨

In Thailand, the troublesome consequences growing in parallel to the economic, population, and urbanization expansion are the increasing of energy consumption demand and municipal solid waste (MSW) generation. The development in conversion of MSW into energy-from-waste (EFW) products; therefore, has received attention as a solution that can fulfill the energy demand as well as resolve the MSW management issues. Although the government has been trying to promote and support the development and investment in EFW, the response was not as satisfactory as expected.

Numerous researches and studies have been trying to overcome the obstacles of EFW development which are caused by inappropriate technologies, inefficiency of solid waste management systems, and feasibility of investment rather than the ineffective cooperation among relevant government organizations in developing and implementing renewable energy and related policies effectively.

When government organizations have to work together, they are dependent and influenced by each other decisions and actions. These behaviors are controlled by institutions. Therefore, the improvement of cooperation among government organizations to develop and implement policies more effectively requires an understanding of institutional conditions and impacts.

For these reasons, the current research aims to study the influences of institutions that constrain and limit effective cooperation among government organizations in developing and implementing policy and propose a guideline for the improvement of cooperation among government organizations from an institutional perspective.

The development and implementation processes of EFW targets under Thailand's 2015 Alternative Energy Development Plan (AEDP) among the main government organizations which are Ministry of Energy (MoEN), Ministry of Natural Resources and Environment (MoNRE), and Ministry of Interior (MoI) were obtained as a case study.

The Institutional Analysis and Development (IAD) framework is used as an analytical tool to analyze and interpret data derived from expert interviews with government staffs working in the three ministries and literature review in respect with qualitative descriptive analytical technique. The institutional scenarios during EFW target development and implementation process are depicted as well as the impacts of institutions on effective cooperation.

Regarding the analytical units in the IAD framework, the exogenous variables which are categorized into three groups of biophysical conditions, attributes of community, and rules-in-use influencing actors and structure of situations in the case study are examined and enumerated.

Action arena considered as the conceptual space where actors interact in particular action situations then analyzed. The internal structures of action situations are delineated followed the seven variables identified in the IAD framework. Meanwhile, the concept of policy capacity (explained as actor's conditions for effective policy development and implementation) is adapted to analyze actors who are government organizations specifically. The modified analytical framework of policy capacity proposes to categorize the components of policy capacity in accordance with actor variables specified in the IAD framework.

Patterns of interaction which flow logically from actors' decisions and actions in the action arena are then scrutinized. This work proposed to examine cooperative interactions through the five levels of cooperation intensity. These levels are reflected in collaboration by 1) pursuing common goals and mutual benefits, 2) pooling resources, 3) sharing responsibility, 4) synchronizing activity, and 5) monitoring partner.

Finally, the forecasted outcomes, which are considered as the effect of cooperation on changing working conditions, are assessed via evaluative criteria (consistency of goals, level of perceived risk, level of trust, and open communication) to identify linkages between cooperation and outcomes.

Regarding the study results, the key findings derived from this research are 1) actors face the difficulties in effective cooperation during the working process because individual actors value their own policy capacity and those of others differently; 2) the imbalance in the internal structure of action situation (especially, among actions, control, and potential outcomes) obstructs the elevation of cooperation to a higher level; 3) rules-in-use, especially informal rules, intensively influence levels of cooperation intensity since they implicitly control the actor's decisions and actions to cooperate with others; and 4) initiating and improving effective communication is the proposed approach which can reinforce effective cooperation among government organizations.