(海外特別研究員事業) 令和1年10月30日

# 海外特別研究員最終報告書

独立行政法人日本学術振興会 理事長 殿

採用年度 平成29年

受付番号 38

五 名 狂 툢 至一

(氏名は必ず自署すること)

海外特別研究員としての派遣期間を終了しましたので、下記のとおり報告いたします。 なお、下記及び別紙記載の内容については相違ありません。

記

- 1. 用務地 (派遣先国名) 用務地:コンスタンツ大学 (国名:ドイツ連邦共和国)
- 2. 研究課題名(和文)<u>※研究課題名は申請時のものと違わないように記載すること。</u> 気候エネルギー政策過程の日独比較研究――利益・利害の媒介性に注目して
- 3. 派遣期間: 平成29年10月1日 ~ 令和1年9月30日
- 4. 受入機関名及び部局名

University of Konstanz, Faculty of Politics, Law and Economics

5. 所期の目的の遂行状況及び成果…書式任意 **書式任意(A4 判相当 3 ページ以上、英語で記入も可)** (研究・調査実施状況及びその成果の発表・関係学会への参加状況等) (注)「6. 研究発表」以降については様式 10-別紙 1~4 に記入の上、併せて提出すること。

#### 5.1. Purpose of the Research

The aim of this research is to investigate how different policy ideas and interests among the organizations are bridged and integrated, comparing climate-energy policy-making process in Germany and Japan. When we compare Japan and Germany, there is no big difference in the degree of citizen's concern for climate change problem (Pugliese and Ray 2009). It is also common that the industry has strong political power and has often strongly opposed the climate change policies. However, in Germany, progressive, large scale climate policies such as environmental tax, emissions trading and the Renewable Energy Special Measures has been introduced. Germany also decided to eliminate nuclear power by 2022 after the Fukushima nuclear power plant accident. Contrary to Germany, Japanese climate policy has been reminded to small scale, voluntary based policies such as energy conservation, nuclear power plants, subsidies, voluntary actions among the industrial sectors. How do these differences come from? In this research, I focus on formal and informal institutions that bridge and integrate the policy ideas and interests of actors. In the policy process in Japan, the ideas and interests are divided into three sectoral blocks and

mutual penetration does not occur. Moreover, such a state of tug-of-war is the condition for the progress of the current Japanese climate policy. On the other hand, existing researches show that Germany has introduced policies flexibly incorporating the interests of each actor (Kitagawa 2015; Rinscheid 2014). Nevertheless, the exact mechanism of this flexible integration of the policies are still not well studied.

By setting this main research question, I conducted the different groups of sub-projects as reported below.

# 5.2. Findings

## (1) Prior researches predicting the progress of the climate policies

Although this project focuses on the institutional setting that enhances the integration of the different policy ideas, it is still the necessary task to prescreen and sort the other empirical findings that predicts the progress of climate policies, which I did in this year. The prior research can be roughly categorized into three groups. The first perspective can be referred to as the population and economic growth and technology perspective. Changes in emissions levels, within this perspective, are dependent on population and economic growth. This indicates that technological innovation is crucial for mitigation (Kaya and Yokobori 1997). Second, in the post-materialist perspective, a partial contradiction is found with the first perspective because it assumes the necessity of social affluence for the spread of post-materialist values, which will eventually lead to public support for active climate policy (Inglehart 1995). The third political institutional perspective focuses on the role of political regimes and the degree of state intervention in the economy (Bättig and Bernauer 2009; Lachapelle and Paterson 2013). These studies are founded on country-level macro-data comparisons. However, such macrostructure determinisms have overlooked certain aspects. First, from a practical viewpoint, such a structure can lead to the conclusion that it would be impossible for countries with less favorable macro structures to pursue the progress in the climate change policy. It remains a question whether better progress in climate change policy is possible despite the existence of negative macro structures. Second, a social scientific theoretical viewpoint leads to the conclusion that macro-level data may not account for the autonomy of the social system, which still exists in each country. Gronow and Ylä-Anttila (2016), for example, note that the degree of progress in climate change measures differs between two closely similar consensus democracy countries—Sweden and Finland—because of the different levels of policy network integration. In summary, while prescribed in the macro structure, it is essential to consider the agency of actors involved in climate change governance who work at the meso-level as is done by this research project.

#### (2) Multiple Streams Framework for investigating the policy integration

To analyze the policy integration in the meso-level perspective, we need an appropriate framework. Multiple Streams Framework (MSF) is a good candidate. In recent years, the development of the Multiple Streams Framework (MSF) has contributed significantly to policy process research. MSF explains how the three streams of policy, politics, and problems couples in a 'window of opportunity' to facilitate policy change. It thus explains the non-linear process that drives policy makers find adequate solutions when solving problems.

Using this framework, I analyzed the German and Japanese climate change policy network with my colleagues. We focus on the integration of policy networks which constitute the policy streams. This configuration of actors in this stream is crucial for evolution of ideas because it depends on the level of integration of the relevant policy network.

Our results show that the German network is more integrated, which explains its relatively progressive institutionalized policy as compared to Japan. Thus, we show how the integration of PNA within MSF illuminates how specific methods might be incorporated within a policy process framework.

### (3) Role of the scientific actors

The MSF framework basically focuses on the network in the policy domain, by setting the constellation of the organization in the policy domain as a given factor. However, different societal structures in policy domains generate different organizational ecologies. These different organizational landscapes in turn lead to the different orientation in the public policy.

In order to investigate this aspect, we conducted another research. We investigate how varying policy networks and organizational ecologies in Germany and Japan produce different policy orientations. By combining qualitative comparative organizational research and quantitative networks analysis, we systematically trace the differential emergence of climate beliefs. German organizations have stronger beliefs in climate science and the economic profitability of climate policy than Japanese organizations, and the varying organizational composition is explaining this difference. In Japan, more than half of the organizations are classified as "science user", these are organizations, which do not have their own capacities to produce scientific knowledge. These organizations remain to be skeptical to climate science and influence the beliefs of other organizations. Compared to Japan, the German societal structure

contributes to the "scientification" of several civil society organizations. Our analysis highlights the importance of focusing on belief formation, because beliefs arise from a combination of interest and ideas, which are in turn influenced by societal structures.

#### (4) Structure of Advocacy coalition

The Advocacy Coalition Framework (ACF) is widely applied framework for the analysis of the policy processes. It is, however, necessary task to develop the method how to operationalize its framework in our dataset. The ACF definition of an advocacy coalition is that "people from a variety of positions who share a particular belief system" (belief homophily condition) also "show a non-trivial degree of coordinated activity over time" (coordination condition). Even though the criteria for the existence of coalitions are relatively straight forward, in practice things are more complicated. Because of this two-fold definition, operationalization of coalitions is difficult, especially for social network analysis. Some researchers start by trying to find subgroups based on belief similarity and then analyze them for the existence of coordination. Other researchers proceed in the opposite order: they look for the existence of coordination among policy actors and then examine whether also similarity of beliefs among these actors is found.

Unlike previous research, I construct an index, the so called Advocacy Coalition Index (ACI), which takes the belief and coordination conditions simultaneously into account. The index postulates criteria for theoretically "ideal" advocacy coalitions and measures the divergence of the empirical coalitions from this ideal. The identification of coalitions then takes three steps: (1) the pair of the actors are plotted in a two dimensional graph where x-axis indicates the existence of the coordination and y-axis the similarity of beliefs; (2) the distance of the plotted pairs from the ideal advocacy coalitions are calculated; (3) the relationships that deviate from the "ideal" coalitions are discarded so that only relationships that meet the definition of advocacy coalitions remain. The major advantage of this approach is that the researcher can set up a cut-off value for identifying advocacy coalitions. The index is also useful for comparing different datasets. The indexed score can also be aggregated from pairs level into the level of both actors and groups. By doing so researchers can identify the different roles of actors (e.g. brokers) and groups (actual advocacy coalitions or coalitions of convenience) play in policy subsystems.

I applied this index to my Japanese and German comparison as well as Sweden and Finland comparison in order to test the robustness of the findings. In Finland there are pro and contra coalitions for ambitious climate policy, which is a typical constellation of advocacy coalitions. In Sweden, however, we observe a large pro-coalition and many actors with intermediating ties. We get the similar result to

Japan and Germany, the firmer is similar to Finland and the latter to Sweden. Moreover, German coalition is not constituted of the fundamental belief difference about climate change but rather different opinion about the concrete policy. As a consequence, the intermediation of the policy idea is more easy in German climate change network.