# [*EVOLUTION OF THE GLOBAL ENERGY GOVERNANCE STRUCTURE: A SCENARIO ANALYSIS FOCUSING ON THE G20*]

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## Overview

This study investigates international energy organizations (IEOs) and the global energy governance structure composed of them. In particular, the study focuses on the G20 as a platform regarded to play a more crucial role in the future. In terms of the current structure, there are some criticisms that it fails to address changes of the energy market appropriately (Florini and Sovacool, 2011). As a representative issue, emerging countries are increasing their voices for reforming the structure, considering that they do not have sufficient chances to participate in it (ERI & Grantham Institute, 2014). As a meaningful step recently made, China which holds the presidency of the 2016 G20 established "global energy governance" as a main agenda of the meetings. However, there are a number of disagreements with regard to reforming the current global energy governance structure. Thus, expectation about how the sturucture will evolve is difficult to make and it is still uncertain despite the significance. This study suggests four scenarios as a probable future of the global energy governance structure. Then, with regard to each scenario, SWOT (i.e., strengths, weaknesses, opportunities, and threats) analyses are conducted. On the basis of the analysis results, the authors present implications and recommendations.

## Methods

This study adopts two most ciritical factors which affect evolution of the global energy governance structure: 1) degree of concession provided to the vested countries for reformation by emerging countries and 2) degree of emerging countries' support for the G20 as the main platform of global energy governance. Through these two factors, four scenarios are derived. Then, a SWOT analysis is conducted for each scenario.

## Results

Figure 1 presents four scenarios brought by two factors. Table 1 and 2 summarize the SWOT analysis result of the four scenarios. The current global energy governance structure is considered to lie in the middle between the sector 1 and the sector 2.

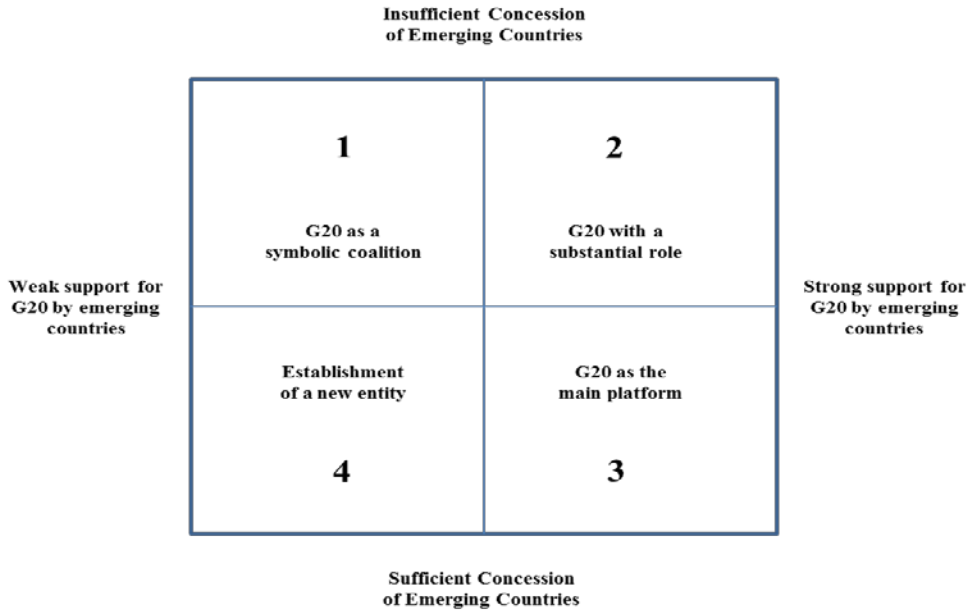


Figure1. Four scenarios about evolution of the global energy governance structure

| | Scenario 1 | Scenario 2 |
|---|---|---|
| Strengths | - Expertise of the existing IEOs<br>- Gradual reformation and stability | - The G20's additional contribution to global energy cooperation |
| Weaknesses | - Rare participation of emerging countries<br>- Insufficient coordination among IEOs | - Difficult coordination among IEOs including the G20 |
| Opportunities | - Respect to the existing IEOs' expertise | - Increasing demand for multi-disciplinary approach |
| Threats | - Pressure for reformation | - Complaints about the current structure |

Table 1. The SWOT analysis result of the first and second scenarios

| | Scenario 3 | Scenario 4 |
|---|---|---|
| Strengths | - Coordination of IEOs<br>- Powerful influence of the G20 | - Flexibility to reflect new energy markets<br>- If agreed, effective implementation |
| Weaknesses | - Difficult agreement within the G20 | - Costs for establishing a new entity<br>- Less influences than the G20 |
| Opportunities | - Increasing demand for close interaction and coordination among IEOs | - Fast changes in energy markets such as climate change issues |
| Threats | - A too high level of expectation about the G20's role and contribution | - Pressures to differentiate from the existing IEOs and the G20 |

Table 2. The SWOT analysis result of the third and fourth scenarios

## Conclusions

This study addressed how the global energy governance structure will evolve, focusing on the G20 which is regarded to become one of the major players in the structure. In particular, four scenarios were derived from two critical factors affecting the evolution. For each scenario, strengths, weaknesses, opportunities, and threats were analysed. The results of this study (i.e., conditions and characterstics of each scenario) will be a useful reference for understanding the global energy governance structure, expecting how it will evolve, and preparing what should be done.

## References

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