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# **Global Energy Governance: Past, Present, and Future**

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## Introduction

What is global energy governance? Governance can be defined as "the act or state of controlling (governing)" something. Based on this definition, global energy governance can be defined as "the act of managing the stability and sustainability of the global energy order." This stability and sustainability entails: (1) ensuring the stability and order of supply, demand, and pricing in the energy market, (2) protecting the international energy security in a broad sense, and (3) dealing with international environmental problems including climate change. Thus, global energy governance is an international management mechanism to address extreme fluctuations in the energy market and their negative impacts, as well as "externalities" of the international energy market including energy security and environmental problems.

# **1.** Global Energy Governance and Ensuring Supply-Demand and Price Stability in the International Oil Market

Regarding ensuring the stability and order of supply, demand, and prices in the international energy market, typical global energy governance efforts can be observed in the mechanisms implemented historically to ensure the stability of supply, demand and prices in the international oil market. In the course of development of the market since the late 19th century, oil prices have often fluctuated wildly, causing severe negative impacts on the countries that produce and consume oil, the international oil industry, the world economy, and international politics. Various management mechanisms have been devised to suppress the adverse effects of such price fluctuations on the economy and have been used to stabilize the market.

These management initiatives include: (1) market management by Standard Oil up to the early 20th century, (2) production adjustment by the Texas Railroad Commission in the United States, (3) the joint control of Middle Eastern oil by the Seven Sisters, (4) output adjustment by OPEC since the 1980s through production ceilings and quotas, and (5) supply-demand adjustment by Saudi Arabia as a swing supplier. These efforts and mechanisms have met with varying degrees of success, some maintaining order and stability in the market, but others being less effective. However, it is true that when such mechanisms, for example the joint control of Middle Eastern oil by the Seven Sisters, functioned properly, the international oil market and crude oil prices did enjoy a period of stability and the fruits of effective global energy governance.

However, the fact that such initiatives have appeared repeatedly over the years reveals that

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initiatives to ensure market stability and order lose their effectiveness over time as the market conditions change, and need to be replaced by new ones.

One important point to note here is the existence of surplus oil supply capacity, which is the basis for achieving market stability and order by coping with fluctuations and adjusting supply and demand. The five initiatives outlined above are a history of various mechanisms for managing surplus capacity. It must also be noted that implementing such mechanisms is always very costly. This is because surplus capacity can be owned only by intentionally and strategically "setting aside a part of the production capacity" that has been acquired through enormous investments. By going through this process, however, the owner of surplus capacity can change from a "price taker" to a "market maker." It is only possible to become a market maker and a master of global energy governance by making the strategic decision that the benefit of controlling the market outweighs the cost of maintaining surplus capacity, and then implementing that decision.

## 2. International Energy Security Management and Global Energy Governance

Another important aspect in discussing issues involved in global energy governance is the mechanism of international energy security management, which appears in the form of issues in international politics or geopolitics and has held strategic importance.

We can review its history by studying how the role of the United States has changed with respect to the security of oil supply, which has long been the centerpiece of international energy security. Long the world's largest oil producer, the United States was once the cornerstone of international energy security as a net oil exporter and owner of surplus supply capacity. For instance, the US not only dealt with supply-demand fluctuations in the market during times of peace but utilized its surplus supply capacity during the First and Second World Wars to meet the additional oil demand of its allies, expanding its oil supply to help maintain and manage its allies' energy security, including national security.

In the 1960s, however, US oil output fell behind its growing demand and the country became a net importer of oil. From that point, international energy security entered a new phase. The United States' role as manager was replaced by OPEC with its additional surplus production capacity. OPEC exerted a tremendous influence on the global supply of oil and its prices through production adjustment and strategic production policies, establishing a decisive influence on international energy security. A typical example is the first and second oil crises and OPEC's strategies and actions at the time. One of the essential elements of "power" in global energy governance shifted from the United States to OPEC.

However, the United States remained at the center of global energy governance even after it became a net oil importer and OPEC began to wield tremendous power. The country made this possible by leveraging its overwhelming power in international politics and military affairs to maintain and manage stability and security in the Middle East, the world's most important source of oil and yet a region that is beset by geopolitical risks. It was also critically important that the United States continued to use its power to safeguard the sea routes that carried oil supplies to key oil consumer countries including in Asia.

Further, the United States launched new approaches to counterbalance its position as a net oil importer and the power of OPEC. One such approach was integrating the forces of advanced countries, which were key oil consumers at the time, to establish the International Energy Agency (IEA) to counter OPEC. The IEA was established at the initiative of the then US Secretary of State Henry Kissinger to match the power of oil producer countries. Since then, the IEA has played a key role in ensuring the stability of the international oil market and international energy security, addressing global energy governance from the developed countries' standpoint.

# **3.** The Status and Challenges of Increasingly Complex Global Energy Governance

We have so far looked at the historical development of global energy governance and the various initiatives taken from two perspectives: the mechanism for surplus capacity management and the essential role of the United States in maintaining international energy security, which remain crucial today regarding global energy governance.

However, issues related to global energy governance change with time in line with structural changes in international politics, the global economy, and the international energy market. That is why it is necessary not to focus solely on the current situation but to adapt to new circumstances when considering the global energy governance of today and the future. Today's new circumstances will lead to diverse and complex problems. For example, issues with global energy governance used to involve mainly maintaining and managing stability and order in the oil market, and likewise, international energy security was all about oil security. While oil will remain important in global energy governance, ensuring market order and stability for natural gas and electricity and maintaining their supply security will become increasingly important in the future.

Although the US remains dominant, the center of the international energy market is shifting toward the growing Asia. IEA member states accounted for roughly 70% of the oil market when the organization was established but that share is now less than 50% and will shrink further. When considering global energy governance, one must now take into account the importance of non-OECD countries, particularly emerging Asian countries such as China, India, and the ASEAN members. Further, regarding initiatives in global energy governance, the rise of new powers may trigger issues such as friction and clashes with existing powers, especially the interests of the United States. Thanks to the shale revolution, the United States is back as the world's largest oil and gas producer and is on the way to becoming a net exporter. As a result, new challenges will emerge in maintaining and managing the stability and sustainability of the world energy market.

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## Conclusion

Lastly, I will return to the two points mentioned earlier, surplus capacity management and the role of the United States in international energy security, and comment on the challenges facing the world at this moment. Regarding the order and stability of the international oil market, the future situation in the Middle East and Saudi Arabia's role must be examined. The growing tensions over Iran pose an increasing risk of destabilizing the international oil market due to possible geopolitical incidents. The response and policies taken by Saudi Arabia, which possesses the largest surplus supply capacity, are of utmost importance for global energy governance. The country will come under increasing global attention as it enters a new phase under Crown Prince Mohammed bin Salman, the young Saudi leader who is pursuing domestic reforms and active and aggressive diplomatic policies, and due to the various uncertainties of this new phase.

Further, while the United States will continue to play an essential role in maintaining and managing global energy governance, the degree of its commitment to doing so is becoming uncertain under the Trump Administration. Maintaining and managing global governance, not only in energy, requires an organization with the strength to shoulder some of the costs and exert leadership for the stability of the entire world. However, the United States now seems to be leaning more toward "America First" than global governance, putting itself before the world. Judging from the ongoing political and economic developments including the country's exit from JCPOA and the intensifying trade war, the US may be viewed as currently shaking global energy governance in various ways.

Constant stability of the international order is a global benefit and a global commons. Responding to the new circumstances to achieve these, including global energy governance, is a top priority for the world going forward.

### Writer's Profile

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Dr. Ken KOYAMA's specialized field of research is: energy security issues and geopolitics of energy; and analysis for global energy market and policy issues. He takes a position of Visiting Professor at Graduate School of Public Policy at the University of Tokyo. He was awarded the degree of PhD in 2001 from University of Dundee, Dundee, Scotland. He plays a role as: a member of International Advisory Board, Energy Academy Europe (Netherland) and International Advisor (Chair in Energy Economics) at Energy Commission of Tenaga Nasional University (Malaysia).