

## **Uncertain Future and Scenario Planning: Discussions in Malaysia**

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On April 6 and 7, I had an opportunity to discuss Malaysian energy challenges with Malaysian energy policy planners and energy researchers. As international adviser to the Energy Commission at the University of Tenaga Nasional in Malaysia since December 2015, I made presentations to lead the discussions in Malaysia.

As the environment surrounding the Malaysian energy market is greatly changing at home and abroad, Malaysian officials and experts who are considering their future energy policy challenges have high interests in various problems and initiatives in Japan and the world. In the discussions in Malaysia, I made presentations on the up-to-date trend of Japanese energy policy initiatives from the three angles of energy security, environmental problems (climate change) and market efficiency (energy market liberalization and deregulation). I then received many questions from discussion participants and felt their high interests in the Japanese energy policy trend.

However, another interesting, impressive point regarding the discussions is that the Malaysian participants are highly interested in scenario planning. This may be because uncertainties are increasing as the energy situation involving Malaysia is changing greatly at home and abroad as noted above. For Malaysia rich with natural resources, the future course of the international oil and gas market is a significant factor influencing its economy. Meanwhile, Malaysia, even though being rich with energy resources, is rapidly increasing energy imports with the energy supply-demand balance changing. Regarding the climate change issue, Malaysia has participated in the Paris Agreement and submitted its voluntary greenhouse gas emission reduction target and will be required to enhance the target. Actually, however, Malaysia is going ahead with large coal power plant construction projects from the viewpoint of economic efficiency or a cut in excessive dependence on natural gas in power generation, complicating problems. For the immediate future, Malaysia faces the problem of how to rationally expand renewable energy's share of the energy mix. For a long term, it is considering the introduction of nuclear power generation. Under such situation, the reform and deregulation of the domestic energy market where state-run companies are dominant are on the table. Malaysia thus faces great energy challenges for the future and sees great uncertainties.

The discussions focused on scenario planning as one of the possible approaches to Malaysian energy challenges. Scenario planning was established as an approach by around the 1960s primarily for studying and decision making regarding policies, business administration and strategies. Oil major Royal Dutch/Shell Group is known for exploiting the scenario planning approach for considering various strategies. At present, its website provides a scenario analysis on a long-term future picture of energy in the world.

The future is filled with uncertainties. Amid uncertainties, it is impossible in a sense to accurately predict the future and it is risky to make policy, strategic or business decisions based on any single prediction. Scenario planning is used to describe multiple (usually two or three) future stories that are structurally different but logically consistent in the respective individual story, depending on key driving forces influencing the future course.

These scenarios are plausible stories that are structurally different, logically consistent and accompanied by temporal elements. Based on such way of thinking, scenario planning seeks to use multiple different scenarios for helping users of the scenario planning make strategic decisions, measure future risks and prepare measures for each future scenario. Scenario planning is expected to brush up an organization's change response capabilities through its flexible and compound thinking and organization members' sharing of scenarios resulting from such thinking.

In fact, scenario planning characterized by the abovementioned features is used by various parties in the world. In the latest discussions in Malaysia, however, participants indicated interests in using the scenario planning approach to consider energy policies and strategies in Malaysia facing various challenges and uncertainties as explained above.

In the discussions, I explained the characteristics and effectiveness of scenario planning, introduced discussion methods and specific processes for IEEJ scenario planning workshops and provided specific past scenario planning achievements. Many participants made serious questions, indicating their strong interests in scenario planning. As a matter of course, no approach can be perfect or comprehensive. Through the discussions, however, I felt that the scenario planning approach may be useful for discussing energy challenges facing Malaysia, working out various future scenarios for these challenges and considering and sharing feasible measures among stakeholders. My impression is that it would be significant to closely watch future discussions in Malaysia and cooperate with Malaysian stakeholders in using or implementing scenario planning as necessary.

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