

A thought on “Energy Policy”

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Given the Great East Japan Earthquake and the ensuing Fukushima Daiichi Nuclear Power Plant accident, reconsideration of Japan’s energy policy has become one of its top priorities. The disaster and accident have unleashed energy policy debate on a global scale as well. Energy policies have thus become one of the most talked about issues. But “energy policy” can be defined variously and discussed from various angles. In the following, I would like to discuss concept of “energy policy” based on my viewpoint.

Energy is indispensable for economic and industrial activities and civil life, and occasionally for military and strategic operations. At the same time, energy is usually developed, produced, transported and consumed under the market system in principle. If these processes are completely left to market forces, however, market externalities and other problems may prevent the best results from being secured for a national economy or the world. Therefore, the government may work on or intervene in the energy market through some means in a bid to prevent, improve or mitigate such problems. Such government actions may be viewed as “energy policy”.

Then, we can divide “energy policy” into such components as “problem perception,” “policy purposes or objectives,” “policy measures,” “policy effect assessment and responses.” These components are all important and closely linked to each other. Since “energy policy” is intended to bring about changes in a situation where the energy industry is left completely to market forces, extra costs are required in addition to those under such situation. This point is a key to a proper interpretation of the linkage between the above mentioned “energy policy” components. For example, additional costs may be required for measures to prevent a situation where a nation’s dependence on the Middle East increases under market forces. Then, the key point of “energy policy” is that whether or not individual economic agents and the national economy as a whole accept such additional costs.

In this respect, the “problem perception” is decisively important. This means that “energy policy” (particularly fundamental, powerful energy policy) must be based on the widely shared perception of serious or grave energy problems, threats or risks. Only under such problem perception may society tolerate additional costs that would be required to conduct more fundamental energy

policy. For example, Japan has conducted one of the world's most powerful energy policies since the 1970s. One reason why Japan has been able to implement such powerful energy policy is that the first oil crisis (the Arab oil embargo and oil price spikes) in 1973 was recognized as a grave problem that could affect Japan's survival. Since then, Japan has implemented comprehensive energy policy including energy conservation, alternative energy development, emergency measures and resources diplomacy, and also established its present energy supply/demand structure with massive efforts and costs under close cooperation between the government and private sectors. In this sense, the March 11 Great East Japan Earthquake and the ensuing nuclear power plant crisis might have been recognized as a problem that is as grave as (or more grave than) the past oil crisis. Therefore, there is the ground for Japan's future implementation of powerful energy policy.

Coming next are "policy purposes or objectives" and "policy measures." The problems here are the level of appropriateness for policy objectives or how reasonable and feasible policy measures should be. Policy objectives are important for the government to specify a vision indicating a target direction and to share the vision with the society and people. The degree or strength of policy objective can determine the cost size for implementing a policy. At the same time, it is important that the policy objectives may become a yardstick for assessing policy effects. The degree to which the policy objectives have been achieved may be significant. But the reasonableness of the objectives themselves may be questioned. If an inappropriate objective is set and achieved, it may not be desirable for a national economy.

As for "policy measures," the selection and prioritization of multiple, various options is important. This is because the policy measures holds the key to the achievement of the policy objectives and determines the overall cost size. Since energy problem solutions may frequently include long-term measures, policy measures for developing and diffusing advanced technology may often become important. In such case, uncertainties about technological progress may make the selection of policy measures difficult. If some policy measures that heavily depends on future technological progress is adopted, the achievement of the policy objectives may also decisively depend on technological progress.

Based on this viewpoint, we must take note of the fact that large-scale and ambitious energy policies have not necessarily been successful as indicated by the history of "energy policy". When the first oil crisis hit the United States, for example, the then Nixon administration came up with the Project Independence initiative seeking to achieve energy self-sufficiency of the country. But the initiative has been viewed as having brought about little effect. This is because larger-scale and more ambitious policies tend to resist prevailing market forces and are more difficult to implement due to their limited feasibility or enormous costs incurred.

In the wake of the Great East Japan Earthquake, challenges that Japan must resolve through its energy policy are unprecedentedly great, complicated and difficult. Specific visions, appropriate policy objectives, reasonable policy measures and a check-and-review process for policy assessment

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are indispensable for Japan's energy policy to resolve the challenges. Japan will be required to collect all of its wisdom and power to implement appropriate energy policy.

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