

Energy Security, Environmental Protection and Economic Competitiveness

Ken Koyama, PhD

Chief Economist, Managing Director

The Institute of Energy Economics, Japan

On October 6 and 7, an international conference titled "Energy and Economic Competitiveness" took place at the Royal Institute of International Affairs, known as Chatham House, in London. Discussions there focused on conditions and challenges facing major countries regarding four policy goals -- the so-called Three Es (of energy security, environmental protection and economic efficiency) and economic competitiveness -- which can trade off against each other. Those discussions also covered these countries' efforts to overcome these challenges and their policy implications. These topics represented most fundamental and up-to-date issues for the present world energy situation. Participants in the conference discussed these issues from various angles. I here would like to summarize the points that impressed me through the meeting.

First, participants in the conference were strongly conscious that the abovementioned challenges, though common to all countries, are serious and difficult particularly in Europe. This may be because the conference took place in Europe with Europeans being dominant among the participants. But the actually serious European situation was a more important factor behind the strong consciousness. In the discussions, the United States whose shale revolution has exerted great influences on the four energy policy goals was compared variously with Europe that is plagued with challenges regarding the four policy goals. Many participants pointed out that Europe has been put in a more difficult situation than the United States.

Regarding energy security, for example, the United States is taking advantage of the shale oil and gas production expansion to accelerate a shift toward "energy independence". In stark contrast, Europe has no choice but to increase its dependence on energy imports in the future. Furthermore, the Ukraine crisis has caused tensions in Europe's relations with Russia regarding energy security. The growing tensions have become a grave challenge for the immediate future. As for environmental problems, particularly global warming, the United States has been steadily reducing carbon dioxide emissions with gas replacing coal under the shale revolution. In Europe, the

expansion of renewable energy use under policy support has triggered higher energy cost and other problems. At the same time, coal consumption has increased due to relatively cheaper coal costs than other alternatives including natural gas, plunging Europe into a situation where it has become difficult to reduce CO₂ emissions.

Furthermore, the shale gas and oil production expansion will allow the United States to substantially reduce energy imports and overall energy costs, invigorate oil/gas, petrochemical and energy-intensive industries and produce various spillover effects on her economy. The United States will thus benefit from the enhanced competitiveness of its overall economy and some specific industries and from economy-boosting effects. In contrast, Europe will be plagued with various competitiveness-affecting factors including higher energy costs than in the United States, a cost hike accompanying the expansion of renewable energy use, possible cost hikes for enhanced long-term measures against global warming, and higher energy security costs for implementing various policy options to cope with energy security challenges including the Russian problem.

In considering these difficult challenges and how to overcome them, we may have to check whether it is appropriate or reasonable to compare Europe with the United States, which is in a special situation benefitting from the shale revolution. Irrespective of such comparison, however, it is significant to question what energy and environmental policies Europe should implement, avoid or revise to resolve the unfavorable factors facing the region.

Therefore, the conference participants actively discussed an analysis of the gas supply security problem regarding Russia, the significance of gas procurement at more competitive prices, the need for fundamental revisions to renewable energy policies, CO₂ pricing and the invigoration of the European Union Emissions Trading System, long-term greenhouse gas emission reduction targets, the EU energy market's further integration for the three Es, relevant infrastructure development and other issues. Medium to long-term efforts, rather than short-term efforts, are required to resolve these issues. But I felt the conference participants were conscious that such efforts should be launched immediately.

Second, the discussion at the conference indicated that the problem of the Three Es and economic competitiveness is more serious and difficult for Japan than for Europe in reality. Japan after the Fukushima nuclear accident is also in a special, severe situation reversing the U.S. situation. Japan is more required than Europe to promote policy discussions on these challenges while locking its sight on the present difficulties. In this respect, future policy discussions in Europe will be undoubtedly helpful for Japan. It is important for Japan to consider how to take advantage of

European policy discussions to have useful lessons learned. Through the conference, I felt that European policy planners are promoting frank discussions with industrial stakeholders on the three Es and economic competitiveness in an attempt to have those discussions reflected appropriately in policies. In this respect, relevant Japanese efforts may be less sufficient than indicated by the seriousness of these challenges. There may be room for Japan to enhance the efforts. Japan will have to organize public arguments that coolly and objectively analyze the entire economic or societal situations and realities in order to resolve the energy challenges facing Japan.

Contact: report@tky.iej.or.jp

The back issues are available at the following URL

http://eneken.iej.or.jp/en/special_bulletin.html