

A Japanese Perspective on the International Energy Landscape (19)

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After IEA “WEO 2010” Symposium in Tokyo

Ken Koyama, PhD

Director

Strategy and Industry Research Unit

Institute of Energy Economics, Japan

On November 9, the International Energy Agency released its latest energy projection, “World Energy Outlook (WEO) 2010,” in London. Subsequently, our IEEJ and the IEA cosponsored an international symposium, including a keynote address by IEA Executive Director Nobuo Tanaka, in Tokyo on November 15. Nearly 350 people participated in the symposium.

The WEO is the IEA’s most important analysis positioned as its flagship product. It is also the world’s most representative and famous long-term energy outlook. The WEO 2010 features a comprehensive, detailed analysis on future energy conditions throughout the entire world, projects energy supply and demand and carbon dioxide emissions through 2035, and suggests policy proposals based on the projections. The latest WEO also features a deep analysis on six important topics – climate change, renewable energy, energy subsidies, unconventional oil, the Caspian energy problem and the energy poverty issue. It then gives three future scenarios as explained below.

What are the key points of the WEO 2010? I would like to focus on the following points, based on the massive report consisting of more than 700 pages, discussions at the Tokyo symposium and my personal views:

The first important point of the WEO 2010 may be found in the development of scenarios. Until last year, the WEO had named a future case of the world with “business as usual” trends and policies as the “Reference Scenario” and based a long-term outlook and analysis on the scenario as a reference. But the latest WEO no longer uses the words “Reference Scenario.” Instead, the “Current Policies Scenario” is given for a case of the world with policies adopted as of mid-2010, which is conceptually close to the past “Reference Scenario.” The key point is that the latest WEO focuses its analysis on a new-concept scenario, called the “New Policies Scenario,” for a case where recently published energy and environmental policies, promises and plans would be implemented, though cautiously. The WEO 2010 positions the “New Policies Scenario” at the center of its analysis and treats it as a benchmark for looking at other scenarios, indicating that the “New Policies Scenario” design and preconditions, and quantitative analysis results based on them are of great importance.

As the third scenario, the WEO 2010 gives the “450 Scenario” indicating a pathway to limiting global temperature rise to not more than 2 degrees Celsius, or GHG concentrations in the atmosphere to 450 ppm, as the previous WEO did. As indicated by this explanation, the “450 Scenario” indicates a model case where measures will be taken to achieve the stated target, taking a “backcasting” approach. It is interestingly separated from the “New Policies Scenario” that is a forecast based on a bottom-up approach. My personal impression is that the world may actually settle somewhere between the two different scenarios including the “New Policies Scenario” that has more plausible implications at present, although the WEO 2010 and discussions at the Tokyo symposium do not necessarily indicate such impression.

Another key point of the WEO 2010 may be that the latest outlook, though building on the detailed, huge quantitative and model analyses, apparently gives greater priority to policy proposals than the past ones. This point is indicated by the executive summary of the WEO 2010. I feel that the latest WEO gives weight to policy implications and proposals based on basic quantitative analyses, rather than to the explanation of such analyses.

These policy implications range wide. But I personally compile these implications into the following six points: (1) the world energy market is faced with the most serious uncertainties in history, (2) the stability of fossil fuels and their markets will be of great importance under any scenario, (3) energy security and global warming measures will grow more important in the uncertain future, (4) while the third point is a global issue, mainly emerging countries (including China) will grow more important for energy security and global warming measures, (5) these policy problems are huge challenges that the international community will face in the future, and (6) as the achievement of these challenges including the realization of the “450 Scenario” is not necessarily impossible, the world will be required to make strong, full-fledged, proactive and serious efforts to achieve the challenges. I refrain here from describing the six points based on numerical data. As a matter of course, however, they are amplified in the WEO 2010.

In summary, the WEO 2010 takes advantage of new future scenarios to emphasize that the world is required to implement strong and proactive energy and environmental policy efforts. Given the WEO’s high attractiveness and importance, its policy messages may have great significance. While the world and each country will seriously discuss policy responses to energy and environmental problems, the WEO 2010 may play a role in giving significant advice for policy discussions and intellectual arguments.

Contact: report@tky.iecej.or.jp