

Abstract of the paper

Thirty years have elapsed since the first oil crisis in 1973, and Japan's energy supply/demand structure has seen dramatic changes during this period. This is a result of the market mechanism and energy policies the government has been developing since that time.

The next 30 years, however, may experience a totally different scenario. In December 2003, the Advisory Committee for Energy and Natural Resources started preparing a long-term prospect report concerning energy supply/demand to 2030. The report will show a totally different picture of the changing energy supply/demand balance for the coming 30 years, compared to what we have experienced in the past 30 years.

The main driving force of such changes in demand over the last 30 years can be found in the rapid progress of energy-saving practices, including changes in business structures, especially in the industrial sectors. On the supply side, the shift of energy sources from petroleum to nuclear, natural gas, and coal have played a major role, especially in the electric power industry. While the market response to the sharp rise in oil prices also played a role in this shift, the contribution made by strong governmental policies should not be ignored. If we can regard the effective use of market responses as a part of these policies by Japan, it may not be an over-exaggeration to say that Japan's comprehensive energy policies have produced some of the most successful results in the world.

Over the next 30 years, on the other hand, there may only be a small amount of room for governmental policies to make a significant contribution. Instead, the problems we are to face in the coming decades should be solved within the layers of limitations induced by such policies, while also placing a priority on preventive measures against global warming. The current study discusses how we can cope with these layers of limitations while resolving the problem we face; it will show the direction Japan should take.

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