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THINK HARD ABOUT RENEWABLE ENERGY

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On September 2, Yoshihiko Noda became the 33rd Prime Minister in postwar Japan. Plagued by intra-party divisions, the government of his predecessor, Naoto Kan, came to a standstill. What is expected of the new prime minister is the steadfast execution of growth strategy to put the Japanese economy on a recovery path. Particularly urgent is the restructuring of Japan's energy policy, which has lost its bearings since the earthquake.

The views expressed in this piece are the author's own and should not be attributed to The Association of Japanese Institutes of Strategic Studies.

Fear of electric power shortages spread across Japan when Mr. Kan requested Chubu Electric Power Co. to shut down the Hamaoka nuclear power plant in May. The out-of-the-blue request was followed two months later by the announcement to introduce the so-called “stress tests,” a safety assessment required of all nuclear reactors under suspension or on regular inspections at the time to pass before being restarted. As a result, large-scale electricity users in Eastern Japan were obliged to curb their consumption by up to 15 percent of what they used last year, while those in Western Japan were requested to do so by at least 10 percent. It appeared that electric consumers and generators were at the mercy of abrupt decisions made by the former prime minister without consultation with his Cabinet.

The patchwork policy is definitely not in Japan’s national interest, only stirring up domestic concern over electricity supply. With little prospect of mid-to-longer term energy policy drawn up anytime soon, power utility companies are being forced to purchase mineral resources at soaring spot prices from abroad; the increased costs will eventually be borne by customers. If energy policy is left as it is, an increasing number of Japanese firms will have to consider transferring their production bases overseas.

At his inaugural press conference, Mr. Noda said he would alleviate concern over power supply shortages by restarting some of the nuclear power plants in the short run. The remarks should be welcomed given that restarting plants, whose safety is confirmed, has social merits in terms of cost effectiveness even if risks are taken into account. At the same time, the new prime minister said that he would not permit the reconstruction of new nuclear power plants and that he would reduce Japan’s dependence on nuclear power by gradually replacing it with natural energy and promoting energy conservation. Whether the direction is sustainable in a mid and long run, we need to debate further.


First of all, the government should make clear the costs borne by Japanese people in the event of replacing nuclear power with natural energy. A law promulgated on August 30 requires utility companies to purchase power generated by renewable sources, but it remains unclear how much exactly is

needed to achieve the target amount of renewable energy generation. While promoting renewable energy generation will contribute to safety in electricity supply, renewables lags far behind the existing sources in terms of power generation efficiency. In order to minimize the costs borne by Japanese people, it is necessary to strike a balance between efficiency and safety in supplying electricity.

Moreover, given that low-price solar panels are being mass produced in China and the United States, the renewable energy law may only encourage imports of panels from abroad without fostering the domestic industry. Narrow focus on renewables could seriously damage national interest.

To come up with the best energy mix in an island country like Japan, what is needed is not just insisting on abandoning nuclear energy. It is also important to consider advancing nuclear technologies that would enable the operation of safer reactors. Given that demands for peaceful use of nuclear power are expected to grow in developing countries, there is ample room for Japanese nuclear engineers to make international contribution in this field.

It is also imperative to reevaluate Japan's energy supply system. With an aim of revitalizing the electricity market, Japan has tried through four rounds of reform to liberalize the electric power generation sector and the large-scale retail sales sector and to separate the functions of power generation and transmission. Despite surges in resource prices, electric prices in Japan have fallen nearly 20 percent in the past 15 years – a result that can be attributed to the series of institutional reform.

Introducing large amounts of weather-dependent energy sources requires scale economies in the operation of electricity generation and transmission. Tighter regulation on access to electrical grids will also be needed. I strongly request the new government to come up with down-to-earth energy policy built on the achievements of institutional reform so far. 

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