

Denuclearization Should Consider Logical Pathway, Consensus of Citizenry: Expectations for Societal Reform Through Natural Energy

Interview with Takejiro Sueyoshi, UNEP FI Advisor



A review in energy policy looks more and more likely, and hopes for renewable energies are growing. We sought the comments of Takejiro Sueyoshi, special advisor to the United Nations Environment Programme Finance Initiative (UNEP FI), who is also an opinion leader in environmental and energy issues.

The tragedy of Fukushima quashes all hopes for nuclear power

- How do you envision the future of nuclear power?

First, my heart goes out to all of the people who suffered from the Great East Japan Earthquake, and who continue to suffer losses and pain from the Fukushima Dai-Ichi Nuclear Power Plant accident. Reflecting on the social disorder after the nuclear accident and the continuing pain experienced by those affected, as a Japanese citizen forced to bear an appalling experience unparalleled in human history, namely the atomic bombing of Hiroshima and Nagasaki, I simply have no hope of a bright future for nuclear power. The majority of Japanese must surely feel this way.

After the Fukushima Nuclear Power Plant accident, I had the opportunity to speak with international experts. This was a debate with experts from the U.S., China, and Germany during an international broadcast program of NHK-BS that aired on April 30 last year. What really struck me was the mutual assessment, in which the beneficial use and the numerous unknown risks of the nuclear power plant were both recognized.

- Many people feel that nuclear power plants lack transparency.

At the beginning of the television program, I described a nuclear power plant accident as unmanageable, uncontrollable, and unpredictable, whose damages goes beyond borders and whose extraordinary risk goes beyond generations. The reality that transpired after the accident in Fukushima has traced my description quite well.

The final processing of nuclear fuel has no foreseeable resting place. The behavior of the radioactive substances dispersed from the accident and the future accident cleanup leave a lot of uncertainty. In fact, the fear of nuclear matter spread around the world and possible ill effects on future generations represent just a small portion of the truckload of unknowns. No matter how much technology advances, the worry over the uncontrollable nature of nuclear power will remain permanently.

Denuclearization Should Be Considered over the Long Haul

- Japan is running zero nuclear plants as of May. Should we continue this total shutdown?

We face an inescapable decision that must be made, when we reflect on this issue. Are we prepared to take the consequences of disposing of all of our nuclear power plants? Or not? As my initial remarks suggest, I feel that zero nuclear power plants is the only answer, but we must also examine the reality of electric power supply in Japan. Policy over the past several decades has driven the nation into nuclear dependency. Right before the nuclear accident, Japan's dependence on nuclear power generation accounted for 30% of all generated electricity. This share was 26% in 2010. The nation's Basic Energy Plan currently undergoing revision work had concluded in 2010, an increase in this share up to 45% by 2030.

The current circumstances, therefore, make matters difficult for an immediate shift to zero nuclear power, although citizen sentiment precludes any expansion or new construction of nuclear power plants. The ruling Democratic Party of Japan has also declared the life of a nuclear power plant to last 40 years. If these two positions hold, we will inevitably reach a nuclear-power

free future. The problem is how to draw up this process.

I look forward to energy and resource conservation, natural energy sources for new energy, and the creation of a recycling economy and society where such conservation and natural energy play a role. An earnest discussion among citizens must take place in order to make this happen.

- Unfortunately, Japan has no prevailing, long-term, “de-nuclear” thinking.

My sentiments, exactly. The government has hoisted the goal of creating a nuclear-power free society, but only as a proclamation without any deadline or scheme. The private sector has been provided no forum to make recommendations or to engage in any dialog. Amidst this backdrop, restarting the nuclear power plants has become the focus. Certainly, a power shortage may occur this summer, and assertions to restart are understandable. But in a persuasive effort, one politician from the DPJ used vicious language by saying, “We will have blackouts. Do you really want to live in the dark?” This kind of threatening argument is thoughtless and immature.

Since 3.11, the citizens of Japan have developed feelings of distrust over nuclear power plants and experts, and a serious distrust of politics and politicians. My sadness is profound when politicians engage in scare tactics and fail to clear away these layers of distrust that have been formed. Why do Japanese politicians always fall back on thought processes exercised in the past?

In what form can the opinions of the citizens be summed up and reflected in policy?

If the Japanese people are unaccustomed to debating or thinking about this issue, we can always look for examples internationally. For example, Germany has decided to eliminate nuclear power by 2022. Their 17 nuclear power plants will be successively decommissioned. A very realistic approach includes the designation of a few nuclear power plants that can flexibly respond to cases when alternative energy initiatives run into difficulties.

I want to draw attention to the ethics commission (Ethics Commission for a Safe Energy Supply) that reached the decision to eliminate nuclear plants in Germany. Especially, I like the name “ethics commission,” which springs from the heart of the matter: The responsibility held by the current generations is for future generations, not just for energy supply and economy.

- The efforts of Germany are commendable, but they might get steered toward abstract theory.

A look into the matter revealed that the German debate began under a grand theme of whether civilization could exist without nuclear power plants. In this context, two of the 18 commission members were religious clerics. The broad dialog actually went beyond lofty abstractions, and covered topics of how to avoid adversarial positions in society, how to preserve Germany’s industrial might while eliminating nuclear power, and whether importing electric power from nuclear power plants internationally might be wrongful.

I could summarize the conclusions as follows: Why are we fixated on high-risk technologies, when we have opportunities to obtain safer energy by increasing alternative energy sources? The ethical obligation here is to avoid high risk and take safer alternative measures.

Compared to Germany, Japan is engaged in an incredibly near-sighted dialog. Energy is acutely needed, so the discussion for today and tomorrow is important. But a discussion today without a future outlook is too haphazard, when it comes to nuclear power plants.

Identical Cost Gauging Unfair Between Nuclear Power with 50 Years of Developmental Policy and Natural Energy

- Everyone gets excited about natural energy, but criticism focuses on the high costs.

This issue really requires fairness in the dialog. Let us consider the costs of power generation and capacity. Comparison between conventional means of generating electricity and natural energy on the same basis is unfair.

Nuclear power and thermal power have received immense amounts of tax money for decades in technological and infrastructure development. They have received every conceivable type of support, and today, of course, we apparently see that nuclear power plants are inexpensive. Otherwise, if their efficiency was poor and costs remained high, all of that support would have been a failure. In comparison, natural energy development has certainly received support, but nowhere near the magnitude of nuclear power plants. The current position of inferiority for natural energy is not surprising at all.

But all of this is changing. Solar panel prices have dropped by one-half over the course of the past year. In fact, grid parity has been reached for some installations. The massive amount of investment initiated worldwide for natural energy will rapidly increase its competitiveness. In 2010, the power generation capacity of natural energy globally surpassed existing, operable capacity of nuclear power generation. The world is already experiencing dramatic advancements.

- Critical views toward European programs and policy for natural energy exist in Japan.

These opinions also lack fairness. In Japan, the purchase program for natural energy (FIT or Feed-In Tariff) begins in July. Germany and Spain, who initiated this program, experienced massive payouts, and reduced the purchase price last year. I believe many opinions focused on this reduction and criticized FIT as a failure.

At the end of 2011, the power generation capacity of solar power plants worldwide was 70 million kW, of which Germany had an overwhelming share at 25 million kW. Japan, who held the top spot globally until just a few years ago, owned just one fifth, or 5 million kW. Italy has jumped up to second place with 13 million kW, more than twice as much as Japan. Including hydropower, Germany obtains 17% of its total generated electricity from natural energy (2011), and has announced targets of 35% by 2020, and 80% to 100% by 2050.

In contrast, Japan's power generation capacity by natural energy is below 1%, or below 5% when hydropower is included. Germany has come from behind and completely left Japan in the dust. Germany repeatedly took on the challenge and in that process reworked the purchase price. The criticizing behavior of Japan, who is not making the same effort, is not constructive. In fact, the criticism sounds like an excuse.

I should add that pinning excessive hopes on natural energy is also unfair. The weaknesses held by natural energy should be well understood. Important dialog should then follow in considering how to overcome such weaknesses and how to globally cooperate, rather than go it alone by Japan.