# Japan's Return to Nuclear Power

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Yoichi Masuzoe, victor in February's Tokyo gubernatorial election, is expected to help bring nuclear power back to Japan. Despite two anti-nuke contenders in the race, the controversial Masuzoe won the election by a landslide. Shortly after Japan's March 11, 2011 triple earthquake, Tsunami, and nuclear disaster, the nation's 50 nuclear reactors were shut down. For a moment, it seemed as if Japan might follow in the footsteps of Germany, while serving as a no-nuke role model for pro-nuke Asian countries China, South Korea and India.

During Masuzoe's gubernatorial campaign, he pledged to increase Tokyo's energy consumption from renewable resources. It currently sits at just 6 percent, which seems low for a country that leads the world in solar and geothermal energy technologies. But Masuzoe is hoping to raise this percentage to 20.

But the no-nuke tide has turned since those desperate days in March 2011, when an exhausted and overwhelmed Prime Minister Naoto Kan--wondering whether a worst-case scenario would occur--called for a nuclear-free Japan.

Atomic energy is making a come-back. Amongst new safety regulations and the claim that nuclear energy provides an important 'base-load power' current Prime Minister Shinzo Abe hopes to have some of the reactors churning anew by early summer. The new governor is sure to back the current prime minister's plans although reactivation may not happen quite as quickly as Abe hopes.

The upcoming third anniversary of the Japan's triple earthquake, tsunami, nuclear disaster should serve as a poignant reminder as to why, pro-nuclear stance or not, nuclear power has no place in Japan:

1. Japan, part of Asia's "Ring of Fire," is home to over 100 active volcanoes and experiences approximately 1,500 earthquakes every year.

2. Japan has a long history of earthquakes followed by Tsunami. The Sanriku coastline alone, (site of the Fukushima Daiichi nuclear plant) has experienced two major quakes in the past 120 years. In 1933, the Showa Sanriku earthquake--magnitude 8.4--spawned a 92-foot tsunami. Three thousand people were killed. In 1896, a 7.2 earthquake produced a tsunami 100 feet high. The episode resulted in 27,000 dead or missing.

3. The cost of the Fukushima triple disaster is estimated to be from US$504 to US$630 billion. Approximately 300 fishing ports and 22,000 fishing boats were destroyed. Some 340,000 people were displaced and 22 million tons of rubble piled up along coastal towns and cities.

4. Radiation from the Daiichi plant covered 8 percent of Japan. Children in some parts of the country such as Minamisoma, could only play outside for 2 hours a day for the next 13 months. Dosimeters were installed outside schools to show radiation levels. Areas with annual exposure of over 50 millisieverts will be uninhabitable for at least 5 years after the disaster. Thousands of people will never be able to return to their homes.

We have learned much in the aftermath of the disaster by studying what happened and assessing the damage. But there are still many unknowns: How much contamination has entered the food chain? What will prove to be the effects of radiation on citizens in the years to come? Will bigger, more destructive earthquakes affect nuclear reactors in the future?

It is these unknowns that should make us cautious about re-embracing nuclear energy. How critical the next nuclear disaster will be, nobody can know.

While there are many factors to consider in the nuclear power debate, perhaps the biggest question to consider is this: Is nuclear power really worth the risk? And has it been worth the risk up until now?

Even if Masuzoe raises Tokyo's energy consumption from renewables to 20 percent, in earthquake prone Japan, that's still not enough.

Noam Chomsky noted recently in an interview with the *Japan Times*, that Japan should follow Germany's example and switch to sustainable energy sources as soon as possible because "the alternatives are too disastrous to contemplate."

http://www.huffingtonpost.com/amy-chavez/japans-return-to-nuclear-_b_4851555.html

QUESTION TO DISCUSSION

1. What do you now about nuclear power?
2. Do you know about the Fukushima Daiichi nuclear disaster?
3. In your opinion, is the nuclear power essential in the 21$^{st}$ century?
4. Do you know any other nuclear disaster?
5. In your opinion, will similar nuclear disaster happen in the future?
6. Can you talk about the dangers of using nuclear energy that you know?
7. Although very dangerous, but Japan still continue use the nuclear energy. Why?
8. If there was an energy crisis, and there were only two way to resolve: reducing the energy of industrial development or using nuclear energy, which way would you choose?
9. Do you agree the using nuclear energy in your country?
10. Do you think that knowledge of nuclear energy and nuclear safety is necessary for all citizens?