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# Why are Japan's Energy Policies Falling Behind?

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# 1. Overview

In addition to the planned recovery from the economic crisis caused by the 2020 COVID-19 pandemic, countries in the EU and the U.S. have implemented drastic measures for a "green recovery" to address the climate crisis. However, Japan has been falling behind in addressing these issues, whether it be in the responses to the climate crisis, the transition to renewable energy, or the transition to Electric Vehicles (EV).

This article will discuss the following topics in regard to this issue: the historical background, conflicting opinions, the identification of the problem, any similarities to Japan's response to COVID-19, and the country's future goals.

# 2. Historical Background

The history of Japan's energy policies can be divided into four major periods.

• High economic growth period (1950s - 1960s)

Japan's economy, after collapsing during World War II, made a recovery in the early 1950s. This was owing to the special procurements from the Korean War as well as the priority production system for coal and steel production. It led to rapid economic growth during the 1960s. In 1951, the electricity industry reorganized into nine electric power companies, which established the nine electric power system.

• Pollution, the oil crisis, and the development of nuclear power (1970s - 1980s)

The environmental pollution in the 1960s and the oil crisis in 1973 had a significant impact on the economic and energy sector in Japan. As a result, Japan strengthened its energy conservation, began renewable energy research and development, and rapidly developed nuclear power.

- Kyoto Conference and electricity system reform (1990 2010)
  In 1997, the Climate Change Conference in Kyoto (COP3) was held and the discussion regarding energy deregulation began. This has been important during the discussion of subsequent energy policies.
- Fukushima nuclear power plant disaster and its aftermath (2011 present) The Fukushima Daiichi Nuclear Disaster (during the Great East Japan Earthquake on March 11, 2011) was a



major turning point in Japan's attitude towards energy. It resulted in the bankruptcy of the Tokyo Electric Power Company (TEPCO), a drastic change in public opinion, the revision of the electric power monopoly system, and the implementation of the feed-in tariff system for renewable energy.

# 3. Conflicting Opinions

There is major debate regarding current energy policies in Japan. This debate can be split into four topics: 1) nuclear power, 2) renewable energy, 3) the climate crisis, and 4) reforms of the energy power market.

Due to the Fukushima Daiichi Nuclear Disaster in 2011, popular opinion about nuclear power has become much more negative. Yet, two years after the disaster occurred, the second Shinzo Abe cabinet began implementing policies that actively promoted nuclear power.<sup>1</sup> As a result, there continues to be significant citizen disillusionment from the government on this issue.

Although the expansion of renewable energy is supported by many stakeholders, there are various disagreements within each point of view. In addition to the concerns in the regional communities regarding the impact of solar and wind power generation on the environment and landscapes, there is also conflict over the rapid expansion of renewable energy sources. A particular focus is on including its impact on the stable supply of electricity and on the electricity bill.

While there is a consensus on achieving carbon neutrality by 2050 within climate policy, there is a disagreement over how this will be achieved. Environmental organizations, corporations, local governments and the Ministry of the Environment (all of whom support the SDGs) aim to actively implement renewable energy and energy efficiency measures to achieve carbon neutrality. However, their views are in conflict with the energy industry, the Japan Business Federation and Ministry of Economy, Trade, and Industry (METI). These groups promote nuclear power, hydrogen power, thermal power, and Carbon Capture, Usage and Storage (CCUS).

The conflicting viewpoints regarding the energy market reforms are between maintaining the current market that the nine major electric power companies have monopolized control over, or the further reform or gradual improvement of the energy market. The latter is advocated by the renewable energy companies and new electric power companies. This group has expanded to include over 700 companies since the Fukushima Daiichi Nuclear Disaster.

# 4. Identifying the Problem

Japan has had a passive attitude towards the climate crisis and is the only country among the G7 to insist on maintaining coal-fired power stations. In recent years, Japan has fallen behind in the rapid expansion of renewable energy and EVs, and its presence and industrial competitiveness in the clean-tech market is inferior to that of China and Europe.

The first reason for this issue is the political structures for the energy and electricity policies. A strong political structure has been built around the monopolized electric power companies. This includes the Japan Business Federation and the METI, as well as the Liberal Democratic Party (LDP). The latter was formed during the period

of high economic growth and nuclear power expansion. There was an "Electric Power Pentagon" that included progovernment media and scholars. This gained power from the second Shinzo Abe cabinet towards the end of 2012.

Under this political structure, the METI has supported the ruling LDP as a secretary-general through the management of bills, policies, and budgets. At the same time, the METI utilised its power of regulation over the energy industry. This was particularly true of the electricity energy industry. The METI maintained its power at the same level of the Ministry of Finance, in the vertical administrative structure of the Kasumigaseki.

This Electric Power Pentagon is a common interest in the existing system. It shares the same "dogma" (myth) which emphasizes nuclear power and coal. This makes them reluctant to adopt new technology and knowledge, such as renewable energy and open electric power markets.

#### 5. Similarities to the response to the COVID-19 pandemic

The issue of Japan's reluctance towards "new knowledge" has become apparent since last year in its response to the global COVID-19 pandemic. There were countries, such as Taiwan and New Zealand, that succeeded in containing the virus while other countries did not. Among the latter countries that did not succeed, only Japan had national experts claiming that "PCR testing will cause the healthcare system to collapse," which was clearly false, from a public health prevention viewpoint. Japan is still not conducting enough PCR tests for the population.<sup>2</sup>

This issue is rooted in the organizational and political culture of Japan. In Japan's political culture, there is a strong myth of infallibility for policies and opinions that have become official. Therefore, it is difficult to freely respond and revise policies with new facts and in situations that are constantly changing, such as during the pandemic and with regard to renewable energy. Additionally, with the "system of irresponsibility"<sup>3</sup> at the center of the government, failures are overlooked and policies that are clearly irrational are officialized due to the "air (pressuring atmosphere)"<sup>4</sup> and a "fake reality"<sup>5</sup> dominating the political space. A typical example is the failure of the nuclear fuel cycle.

# 6. Future Goals

This is another example of the nuclear fuel cycle. In the 2021 LDP presidential election to replace Prime Minister Yoshihide Suga, Taro Kono (who was popular among the citizens) was defeated by Fumio Kishida. Japan missed another opportunity for a reform. One of the reasons for Kono's defeat was because the Electric Power Pentagon (which includes former Prime Minister Shinzo Abe and the Japan Business Federation) took actions to prevent Kono's proposal of reviewing the nuclear fuel cycle.

What Japan should aim towards is clear. In addition to addressing the climate crisis, a drastic "green recovery" is needed to fix the social disparities that were made apparent during the COVID-19 pandemic.

Solar power and wind power generation (which have great potential) can be expected to expand rapidly. This is because they are the most low-cost and clean purely domestic energy sources. Along with the rapid expansion of EVs, the cost of storage batteries is also rapidly decreasing. These factors are revolutionizing the foundation of mobility and electric power energy sectors. In this historical reality, it is important to design a policy that organizes

a fair and transparent market based around the three pillars: renewable energy, energy efficiency, and motorizing mobility. Furthermore, measures can be taken to address the climate crisis whilst creating green jobs. For example, insulation existing low-income houses could be improved and energy independence (to address energy poverty) could be developed.

It is necessary to move away from energy policies from the Electric Power Pentagon. This includes moving away from the influence of the electric power and energy industries established since the end of World War II and a move towards energy policies that focus on individual lives and future generations.

<sup>1</sup> Miharu, Mitsuki (Haru). Mirai (Future) Election Project. "10 Years After the Disaster: Public Opinion on Nuclear Power." March 10, 2021. <u>https://note.com/miraisyakai/n/nf87574afcea3</u>

<sup>2</sup> Japan ranks 150th in the world for PCR testing per population. (As of September 30, 2021; According to Our World in Data)

<sup>3</sup> Maruyama, Masao (1964). "System of Irresponsibility." Thoughts and Behavior in Modern Japanese Politics. Saitama: Miraisha

<sup>4</sup> Yamamoto, Shichihei (1983). Study of Air. Tokyo: Bungei Shunjū.

<sup>5</sup> Van Wolferen, Karel (1994). The Enigma of Power. Tokyo: Hayakawa Shobō.

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Chairperson of Institute for Sustainable Energy Policies (ISEP), a non-profit and independent institute in 2000 to pursue "energy democracy". Studied nuclear engineering master school at Kyoto University, then worked in the nuclear industry. Stopped the nuclear career, studied the history and politics of energy transition as well as the sustainable energy policies at Lund University with a lot of field studies prior to his current position. He is a leading authority and opinion leader in Japan in the energy policy field, including nuclear and especially renewable energy policy, and known as a "Social Innovator".