



E-PAPER

The Feasibility and Future of Japan's Climate Policy

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Overview

Japan has set an ambitious target of attaining carbon neutrality by 2050. However, the government seems unwilling to abandon nuclear and fossil-fuel options. Also, many Japanese, particularly those who are struggling economically due to a prolonged recession, view climate change as a preoccupation of the elite rather than a pressing issue. To give substance to climate policy, the climate movement needs to be galvanised, to better inform the public and challenge the ruling party to implement its promises. What is needed is for the international community, and in particular countries such as Germany that aim to become both nuclear free and carbon neutral, to serve as model cases and show that it is economically viable to make the transition towards a clean-energy society.

Introduction

In 2020, Japan's former Prime Minister Yoshihide Suga set the goal of achieving carbon neutrality by 2050. Just one year later he left office due to public disapproval of his handling of the Covid-19 pandemic. As a result, Fumio Kishida replaced him as leader of the Liberal Democratic Party (LDP), winning the general election and becoming prime minister on October 31, 2021. The climate crisis was not a major issue in the election, and the LDP secured a majority of seats.

Two days later, Prime Minister Kishida upheld the goal of carbon neutrality by 2050 in his speech at COP26 in Glasgow, Scotland. Kishida pledged up to US\$10 billion in climate funding to help developing countries, but indicated that he would maintain coal-fired facilities. The same day, the Climate Action Network awarded Japan the "Fossil of the Day Award", claiming that Kishida's plans would promote thermal power generation and increase carbon output.

How did Suga, who has never been associated with climate policy, come to set ambitious decarbonisation targets? Is the Suga government's decarbonisation roadmap practicable? And will the Kishida government move Japan's climate policy forward or backward¹?

1. Japan's 2050 carbon neutral declaration

1.1 What triggered such a pledge from former Prime Minister Suga?

In his State of the Union address on 26 October 2020, former Prime Minister Suga declared that Japan would reduce its overall greenhouse gas emissions to zero by 2050, aiming to achieve a carbon-neutral, decarbonised society by 2050. This was a major step forward from the Abe administration's 2015 target of a 26% reduction in greenhouse gas emissions by 2030 and an 80% reduction by 2050 (compared to 2013 levels), which was welcomed by the international community, including UN Secretary-General António Guterres.

Suga, who as Chief Cabinet Secretary underpinned the second Abe government for nearly eight years, had originally promoted the export of coal-fired power, citing the efficiency of Japan's coal power plants. His switch to carbon neutrality was likely prompted, primarily, by international pressure. Unlike previous LDP prime ministers, Suga is not from a prominent political family. Perhaps he hoped to bolster his popularity by bringing Japan into alignment with international policy goals.² A secondary influence may have been the rapid global decarbonisation of industry and investment. It was his coalition partner, the Komeito party, that included in the government agreement the words "accelerate climate action" and "build a decarbonised society"³. It is also believed that even industry leaders and the Ministry of Economy, Trade and Industry (METI), the biggest opponents of climate change action, could not ignore this trend and were forced to approve the decarbonisation target⁴.

¹ On 19 June 2021, in advance of the House of Representatives elections, Green New Deal Policy Research Group Japan held a webinar, "How will Japan confront the climate crisis?". During the webinar, members of parliament from each political party presented their climate policies and answered questions from activists, researchers and participants working on the climate crisis. This paper answers these questions by analysing the content of the webinar, the parties' general election pledges and public opinion polls. Green new Deal for Japan (2021), "Webinar: How will Japan confront the climate crisis?" 19 June 2021

https://www.youtube.com/watch?v=2pFE94fptoM&feature=emb_logo

² Masayoshi Kanechi and Kaoru Komoda (2020), "Behind the Scenes of Suga's 2050 Carbon Neutral Declaration", Nikkei XTEC, 27.10.2020

<https://xtech.nikkei.com/atcl/nxt/column/18/00001/04772/>

³ Komei Party News (2020) "Liberal Democrats Agree on Coalition Government", 16 September 2020

<https://www.komei.or.jp/komeinews/p120939/>

⁴ Masayoshi Kanameji and Kaoru Komoda (2020), above.

Former Prime Minister Suga had underscored his willingness to decarbonise by appointing Taro Kono (son of former LDP President Ichiro Kono), one of the party's most prominent renewable energy advocates, as Minister for Administrative Reform and Shinjiro Koizumi (son of former Prime Minister Koizumi) as Minister for the Environment. However, the short-lived Suga government was not able to pursue its decarbonisation goals.

1.2 Will the government plans lead to carbon neutrality in 2050?

In order for the world as a whole, including developing countries, to meet the Paris Agreement's target of limiting global warming to 1.5°C, developed countries should reduce their greenhouse gas emissions by more than 100% (negative emissions) by 2030, taking into account their carbon budgets and historical responsibilities⁵. Currently, of the top ten greenhouse gas emitters, only Japan, Australia and the European Union have legally binding commitments to net zero emissions, and only by 2050⁶.

On 26 May 2021, the House of Councillors unanimously passed and enacted the "Revised Law on the Promotion of Measures to Cope with Global Warming"⁷, which clearly states the goal of "the realization of a decarbonized society by 2050"⁸. On 22 October, in order to achieve this goal, the Suga government approved a series of plans related to climate change and energy policy, including the Sixth Basic Energy Plan, the Global Warming Prevention Plan, Japan's Nationally Determined Contribution, and a long-term strategy for growth based

⁵ Jusen Asuka (2021) Green New Deal, Iwanami Shinsho, p39

⁶ Dominic Carver (2021) "Global Net Zero Commitments", UK Parliament, 12 November, 2021
<https://commonslibrary.parliament.uk/global-net-zero-commitments/>

⁷ NHK (2021) "'Decarbonised Society by 2050': Revised law to promote global warming measures passed" 26 May 2021
<https://www3.nhk.or.jp/news/html/20210526/k10013052501000.html>

⁸ "Law Concerning the Promotion of Measures to Cope with Global Warming" Chapter 1 General Provisions, Article 2-2 (Basic Principles)
https://elaws.e-gov.go.jp/document?lawid=410AC0000000117_20210602_503AC0000000054&keyword=%E5%9C%B0%E7%90%83%E6%B8%A9%E6%9A%96%E5%8C%96%E5%AF%BE%E7%AD%96%E6%8E%A8%E9%80%B2%E6%B3%95

on the Paris Agreement⁹. However, critics claim that these plans will not lead to carbon neutrality in 2050, as they rely on the preservation of coal-fired power generation and nuclear power plants, and on technological innovations with no practical applications in sight.

The plans include 19% coal and 20% LNG in the 2030 power mix¹⁰. The government claims to be aiming to decarbonise thermal power generation with hydrogen/ammonia and carbon capture and storage (CCS/CCU) technologies. At present, the economic viability of CCS/CCU is questionable, however. In addition, hydrogen and ammonia are currently derived from fossil fuels, which emit CO₂ and are expensive.

The plan calls for a 20-22% share of nuclear power in 2030, but this would require the restoration of old nuclear power stations with safety problems and the construction of new ones, which is unrealistic. Not only have the dangers of nuclear power plants been made clear by the Fukushima disaster, but they are also losing their cost advantage to solar and wind power, for which costs are rapidly falling¹¹. In recent years, nuclear power has accounted for only 6% (2019) of the electricity generated in Japan. In March 2021, 10 years after an earthquake and tsunami damaged the Fukushima Daiichi nuclear plant, NHK conducted a public survey asking what should be done about nuclear power.¹² Some 67% of respondents said that nuclear power should be "reduced" or "abolished entirely", far more than the 32% who said it should be "increased" or "maintained as it is". The government policy of promoting nuclear power is not only unrealistic, but also runs counter to public opinion.

⁹ Agency for Natural Resources and Energy (2021) "The Sixth Basic Energy Plan" 22 October 2021
https://www.enecho.meti.go.jp/category/others/basic_plan/

Prime Minister's Office (2021) "Global Warming Prevention Plan" 22 October 2021
https://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai48/pdf/keikaku_honbun.pdf

Prime Minister's Office (2021) "Japan's NDC (Nationally Determined Contribution)" 22 October 2021
https://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai48/pdf/ndc_kouken.pdf

Prime Minister's Office (2021) "Long-term strategy as a growth strategy based on the Paris Agreement", 22 October 2021
https://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai48/pdf/senryaku_honbun.pdf

¹⁰ Agency for Natural Resources and Energy (2021), "Outline of the Basic Energy Plan", October 2021, p12
https://www.enecho.meti.go.jp/category/others/basic_plan/pdf/20211022_02.pdf

¹¹ ISEP (2021) "Comments and Recommendations on the Sixth Basic Energy Plan", 14 September 2021
<https://www.isep.or.jp/archives/library/13516>

¹² NHK (2021) "What should be done about nuclear power in Japan in the future: 10 years after the nuclear accident, Public opinion poll", 2 March 2021:
<https://www.nhk.or.jp/politics/articles/lastweek/54794.html>

At the same time, the government's target for the introduction of renewable energy as a share of electricity is low, at around 36-38% in 2030. Renewable energy already accounts for 18% of the electricity supply, and the Ministry of the Environment estimates that there is a resource potential of at least twice as much (2618 TWh) as the electricity supply (1027 TWh, 2019)¹³. It is possible to significantly increase the amount of renewable energy depending on policies. Although the government states that it is "committed to the maximum possible introduction" of renewable energy by 2050, it has not introduced measures to ensure priority connection and supply.

The government's energy plans appear to have been discussed and formulated in closed councils, without input from a variety of sources. As a result, policies that preserve nuclear power and coal have been maintained. Although a call for public comments was made, the thousands of comments received by environmental organisations and others were not taken into account when the cabinet made its decisions¹⁴.

2. Why has climate change not become a major campaign or election issue in Japan?

2.1. Suga's resignation and the election of LDP's president

Following the resignation of Prime Minister Suga, the Liberal Democrats held an election for the party presidency. Among four candidates, only Taro Kono was an advocate of the expansion of renewable energy. Fumio Kishida, who called for a "break from neoliberalism", was the "safest" choice amid a complex web of internal party interests, including energy interests, and was far ahead of Kono in the run-off vote. The LDP chose Kishida as its new president and went straight into a general election.

¹³ Ministry of the Environment (2020) "Japan's Renewable Energy Installation Potential"
<https://www.renewable-energy-potential.env.go.jp/RenewableEnergy/doc/gaiyou1.pdf>

¹⁴ Kiko Network (2021), "Comments on the Sixth Draft Energy Basic Plan", 4 October 2021:
<https://www.kikonet.org/info/press-release/20211004/eneki2021>

2.2. Was the climate crisis an issue in the general election?

In the October 2021 general election, voter turnout was just under 56%, the third lowest in the post-war period. Voter turnout in Japan has been on a downward trend since the introduction of proportional representation in the primary elections in 1998, and has been below 60% for three consecutive elections. Perhaps one factor is the limited media coverage of the government's performance on important issues, and the lack of debates between party leaders or candidates ahead of the vote. The conservative Liberal Democratic Party (LDP) won 261 seats, more than a majority on its own.

Voters in Japan are not highly engaged with the climate crisis and, as in previous years, it was not an issue in this general election. Surveys conducted before and after the vote showed that the economy and jobs were the most important policy issues for voters, at between 25% and 35%, while environmental and energy policies, including the climate crisis, were only mentioned by 6% of voters¹⁵. The global Climate March in September 2019 attracted hundreds of thousands of people in Germany and Australia, but only 5,000 in the more populous country of Japan.

This is not because the climate crisis is not impacting Japan. On the contrary, in 2018, the Environment Ministry reported that Japan's annual temperatures are rising faster¹⁶ than the global average¹⁷. In particular, the number of extremely hot days with a maximum temperature of 35°C or higher has increased significantly since the mid-1990s¹⁸, sending people to

¹⁵ NHK (2021) "House of Representatives election: 56% 'must go', what policies do you focus on? Public opinion poll" 18 October 2021
<http://www.nhk.or.jp/politics/articles/lastweek/70370.html>

Jiji Press (2021) "Economy, employment and Corona measures important in choice of polling place - Exit poll", 31 October 2021
<https://www.jiji.com/jc/article?k=2021103100830&g=pol>

Kyodo News (2021), "Economic policy most important in voting, Trend Survey: Corona measures fall", 2 November 2021
<https://www.sanin-chuo.co.jp/articles/-/116265>

¹⁶ Ministry of the Environment et al (2018) "Climate Change in Japan and Its Impacts"
https://www.env.go.jp/earth/tekiou/pamph2018_full_Eng.pdf

¹⁷ Margolis, Eric (2021) "The True Cost of the Climate Crisis on Japan", The Japan Times
<https://www.japantimes.co.jp/life/2021/01/16/environment/cost-climate-change/>

¹⁸ Japan Meteorological Agency (2020) "Japan's Climate Change 2020", p5
https://www.data.jma.go.jp/cpdinfo/ccj/2020/pdf/cc2020_gaiyo.pdf

hospitals and damaging the country's rice crops, as well as fruit and fisheries. There has also been a significant increase in the frequency of torrential rains¹⁹; the heavy rains in western Japan in July 2018 caused extensive damage, with more than 200 people killed in floods and landslides. A recent study showed that the probability of this heavy rainfall in western Japan was up to about 3.3 times higher than it would have been if there had been no effect of global warming²⁰. Despite all this, why has climate change not become a major campaign or election issue in Japan?

3. Economic anxiety and lack of media coverage make climate change less of an issue

The background to this is the long deflationary recession of the "lost 20 years" that began in the 1990s after the collapse of the bubble economy, and the resulting widening economic disparities and poverty. While Japan is still the world's third largest economy in terms of nominal GDP, the poverty rate²¹ is 15.7% and the child poverty rate is 14.0%²². The proportion of non-regular workers has doubled over the past 20 years to 37%, and disposable income continues to fall²³. According to a 2019 survey by the Ministry of Health, Labour and Welfare

¹⁹ Japan Meteorological Agency (2020), "Special Feature: Protecting Lives and Livelihoods from Severe Heavy Rainfall Disasters", Climate Services are Now, Kenseido Printing Co.
<https://www.jma.go.jp/jma/kishou/books/hakusho/2020/index1.html>

²⁰ Imada, Y., Kawase, H., Watanabe, M., Arai, M., Shiogama, H., and Takayabu, I. (2020) "Advanced risk-based event attribution for heavy regional rainfall events", *npj Climate and Atmospheric Science*, 3, Article number: 37
<https://www.nature.com/articles/s41612-020-00141-y>

²¹ The proportion of people whose household income is less than half the median income of the whole population; in 2018 the median household income in Japan was 2.54 million yen, half of which was 1.27 million yen (Ministry of Health, Labour and Welfare 2020, below).

²² OECD (2018) "Poverty rate"
<https://data.oecd.org/inequality/poverty-rate.htm>

²³ Ministry of Health, Labour and Welfare (2021) "Current situation and challenges of non-regular employment"
<https://www.mhlw.go.jp/content/000830221.pdf>

(MHLW), 54.4% of households said they were "struggling" to make ends meet²⁴. Economic anxiety, with no relief in sight, has sapped people's interest in politics and social issues, and may have contributed to low voter turnout and the small scale of the climate movement. For many, climate change is a "luxury issue" that only students and elites can afford to care about.

Another reason may be the lack of media coverage linking climate disasters to climate change. Before the Fukushima accident, it was taboo to report on the dangers of nuclear power. The big power companies were spending huge amounts of money on advertising to promote the safety and benefits of nuclear power, while pressuring the media not to report on its problems²⁵. In the aftermath of the Fukushima disaster, the issue of nuclear power has finally become less of a taboo in Japan, but even today the major power companies continue to run commercials promoting nuclear power as "the power we need to decarbonise"²⁶.

On climate change, it is no surprise that the major power, steel and fossil fuel companies, who own 167 operating coal-fired power stations (as of February 2022), are exerting similar pressure on the media²⁷. In fact, the Japanese media is not reporting on climate change in a way that matches the severity of the problem. In a 2016 study of climate change coverage, Global News View (GNV), a media research organisation based in Osaka University, noted that "without major international conferences and agreements, there is little coverage of climate change"²⁸. In September 2019, the United Nations hosted a Climate Action Summit, accompanied by a global "climate march" calling for action on climate change, with an estimated four million participants, the largest in history. But the Yomiuri Shimbun, Japan's largest circulation newspaper, ran only seven articles on the historic summit and demonstrations, and the liberal Asahi Shimbun ran 12 articles. In all, this was only one-sixth the coverage of the Rugby World Cup being held in Japan at the time²⁹.

²⁴ Ministry of Health, Labour and Welfare (2020) "Overview of the 2019 National Survey on Living Standards", p14
<https://www.mhlw.go.jp/toukei/saikin/hw/k-tyosa/k-tyosa19/dl/14.pdf>

²⁵ Honma, Ryu (2013), Nuclear Power Advertising, Aki Shobo

²⁶ Kansai Electric Power Company Commercial "Living in a Zero-Carbon Future"
<https://www.youtube.com/watch?v=Um0N5W-MLrE>

²⁷ Japan Beyond Coal (2022) "Update on coal-fired power stations (1 February 2022)",
https://beyond-coal.jp/news/data-update_20220201/

²⁸ Nakai, Mizuki (2017) "Climate change reality and action: what's being reported?" 27 July 2017
<https://globalnewsview.org/archives/5203>

²⁹ Virgil Hawkins(2019) "Watchdogs that don't bark: climate change and the media" 30 September 2019
<https://globalnewsview.org/archives/10487>

4. Will the Kishida government move forward or backward on climate policy?

In his policy speech on 6 December, Prime Minister Kishida said that he would continue the policy of former Prime Minister Suga and "formulate and vigorously promote a clean energy strategy that links measures to combat global warming to growth, with a view to achieving carbon neutrality by 2050". But renewable energy advocates such as Kono, his rival in the election for LDP president, and Koizumi, who backed him, have been excluded from ministerial posts and given the cold shoulder. On the other hand, the government has made a strong push for a return to nuclear power by appointing pro-nuclear activists Koichi Hagiuda and Daishiro Yamagiwa as Minister of Economy, Trade and Industry and Minister of Economic Revitalisation, respectively³⁰. In Japan, the pro-nuclear camp and the pro-fossil fuel camp are almost identical, and they are the same forces that have blocked the introduction of renewable energy. Given these facts, it is natural to assume that the Kishida government will back-track on climate action³¹.

So, is there no hope for action on the climate crisis in Japan? In fact, there were two major changes in this election. The first is that all political parties have made carbon neutrality in 2050 a key policy goal (Table 1). As mentioned earlier, in May, the House of Councillors unanimously passed the revised Law on the Promotion of Measures to Cope with Global Warming, which specifies a decarbonisation target for 2050. It is also clear from the webinars held by our Green New Deal Policy Research Group in June with members of parliament and candidates from each political party, as well as from the manifestos of each political party for the House of Representatives elections, that each party is increasingly

³⁰ FRIDAY Digital (2021) "The 'nuclear power promotion' pocketbook sent by ex-PM Abe to the Kishida cabinet", 8 October 2021
<https://news.yahoo.co.jp/articles/762fbe24800fea655977b0f4d29d9dfcae72272b>

³¹ Nikkei Newspaper (2021) "Decarbonisation, the government's driving force in the shadow of Suga's signature policy, fizzles out", 15 December 2021
<https://www.nikkei.com/article/DGKKZ078447630U1A211C2EA1000/>

addressing the climate crisis and providing concrete suggestions. Compared to the last general election in 2017, climate policy has taken a step forward. This means that Japanese politicians are not indifferent to the international climate crisis policy trend. The second is that the Communist Party and the newly elected Reiwa Party have set out policies similar to the Green New Deal and Green Recovery. This means that these parties share the view that climate crisis policy is not just environmental policy, but also a comprehensive economic policy that involves large-scale industrial and energy structural change. Though these are not mainstream parties, they do have a voice in the parliament and the potential to exert influence on these issues.

Table 1. List of climate commitments for each political party

	Greenhouse gas emission reduction target for 2030	Greenhouse gas emission reduction target for 2050	Coal-free power generation target	Renewable energy introduction target	Nuclear power free target	Fiscal investment scale
Liberal Democratic Party	46% reduction (compared to FY2013)	Carbon Neutral	None Higher efficiency of thermal power plants	Introduce as much as possible and make it the main power source	Promote nuclear power Promote the development of new reactors, fast reactors and nuclear fusion and the training of human resources	None
Komeito	46% reduction (compared to FY2013)	Decarbonisation	None Promotion of ammonia power generation	36%-38% by 2030	Zero nuclear power in the future	None
Constitutional Democratic Party	55% reduction (compared to FY2013)	Decarbonisation	Shift away from coal-fired power generation	50% in 2030 100% in 2050	Zero nuclear power as soon as possible	None
Communist Party	50-60% reduction (compared to FY2010)	Decarbonisation	No coal-fired power generation in 2030	50% in 2030 100% in 2050	No nuclear power plants in 2030	150 trillion yen of private investment and 50 trillion yen of public investment by 2030
Nippon Ishin / Japan Innovation Party	46% reduction (compared to FY2013)	Carbon Neutral	None	Increase the share of electricity generated	Fade out due to market forces	None
National Democratic Party	None	Carbon Neutral	None	40% in 2030	Maintain nuclear power plants Use for the time being	None
Social Democratic Party	60% reduction (compared to FY2013)	100% reduction	No coal-fired power generation in 2030	50% in 2030 100% in 2050	Abolish nuclear power plants within 5 years of enactment of the Zero Nuclear Power Plant Basic Law	None
Reiwa Shinsengumi	50% reduction (compared to FY2013)	Carbon Neutral	No coal-fired power generation in 2030	50% in 2030 100% in 2050	Immediate ban on nuclear power plants	200 trillion yen over 10 years for public and private sectors combined

political party for the House of Representatives elections, that each party is increasingly addressing the climate crisis and providing concrete suggestions. Compared to the last general election in 2017, climate policy has taken a step forward. This means that Japanese politicians are not indifferent to the international climate crisis policy trend. The second is that the Communist Party and the newly elected Reiwa Party have set out policies similar to the Green New Deal and Green Recovery. This means that these parties share the view that climate crisis policy is not just environmental policy, but also a comprehensive economic policy that involves large-scale industrial and energy structural change. Though these are not mainstream parties, they do have a voice in the parliament and the potential to exert influence on these issues.

5. Conclusion

Due to growing international and domestic pressure, Japanese political leaders have committed to the target of carbon neutrality by 2050. However, the current government roadmap seems unlikely to lead to that goal. At the same time, the Japanese people, in general, fail to recognise the urgency of these issues. For "carbon neutrality in 2050" to be more than a rallying cry, the climate movement needs to be galvanised, and to join hands with political forces to promote ambitious economic and climate policies. This will not be easy in Japan, where the media has been influenced by the fossil fuel and nuclear industries.

Decarbonisation is not only an environmental issue. It has the potential to create massive investment, new industries and new jobs. Currently, in the United States, the Biden administration is making huge financial investments in renewable energy, effectively steering the country towards a Green New Deal, which is having some impact on Japanese policy. China is also pushing ahead with the development of renewable energy facilities, electric vehicles and storage batteries, posing a threat, but also providing a stimulus to a range of Japanese industries. And the European Union is trying to lead the world in decarbonisation with its Green Deal policies. However, if the French and others argue that nuclear power is a decarbonising energy source in the EU taxonomy, Japan will be quick to promote nuclear power, which will prevent the introduction of renewable energy. It is to be hoped that countries such as Germany, which strive to both eliminate nuclear power and decarbonise their economies, will become model cases that countries like Japan can emulate.