ABENOMICS AND ITS POLITICAL IMPACT ON ENERGY POLICY AND CLIMATE CHANGE GOALS

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JUNE 14, 2023
AARHUS UNIVERSITY
Analysis of Contemporary Japanese Society and Politics F23

Table of Contents

Abenomics and its political impact on energy policy and climate change goals

Introduction

An earthquake and tsunami hit the Tohoku region on 11 March 2011, resulting in a meltdown at the Fukushima Daiichi nuclear power plant (Kameyama 2016, 129). The Fukushima accident further made Japan's energy source situation more complicated. It also imposed a challenge for the country to reach its reduction targets with the current energy mix, that after nuclear shutdowns heavily relied on fossil fuel energy (Incerti and Lipscy 2018, 629). The LDP regained power after a landslide victory in 2012 and elected prime minister Shinzō Abe called for 'Abenomics' to boost the economy. On energy and climate policy, Abe stated he would "*reconsider from zero-start*" meaning that the GHG emission target for 2020, as well as the phasing-out of nuclear power plants, would be fully reconsidered (Kameyama 2016, 138). This political attitude influenced Japan's participation in the Paris Agreement an international agreement adopted by 194 parties (193 countries plus the EU) in December 2015, which serves even today as the international outset for climate change reduction targets (Briggs and Stallard 2023).

In this paper I argue that the economic growth-focused objective of 'Abenomics' has shaped Japan's climate change goals at the 21st Conference of the Parties (COP21) and energy policy in the aftermath of the 3.11 Fukushima incident, leading up to the conference. Therefore, I want to answer in this research paper the question: "How has the economic growth objective of 'Abenomics' shaped Japan's climate change goals at the COP21 in Paris 2015 and energy policy in the aftermath of the 3.11 Fukushima incident?"

Theory

The below theoretical framework sets the stage for examining the relationship between 'Abenomics', climate change goals, energy policies, and the influence of political, economic, and social factors.

Political Economy

The theory of political economy provides a theoretical outset to explain the connection between economy and political decision-making in 'Abenomics'. The theory of political economy, as

expressed by Allan Drazen, focuses on the interdependence of political decision-making and its effect on the economy (Drazen 2002, 5). James A. Caporaso and David P. Levine state that social scientists have retrieved the term political economy, in part to insist that the economy is unavoidably political and it refers to the imposition of political agendas on the economy (Caporaso and Levine 1992, 3–5). The same connection becomes apparent when looking at 'Abenomics', which are, as Yasuko Kameyama puts it, policies that aim to stimulate economic growth (Kameyama 2016, 138) and prioritise economic growth before anything else (Incerti and Lipscy 2018, 610). Policy implementation is characterized by the actions of multiple levels of agencies, institutions, organizations, and their actors and is influenced by context (DeGroff and Cargo 2009, 48). This implies that it is also relevant to look at e.g., economic interest group's influence on policy implementation when analysing the effects of 'Abenomics'. The above justifies viewing the influence of 'Abenomics' from a political economy point of view.

Slow Violence

'Slow violence' as expressed by Rob Nixon, refers to damage whose effects first become apparent over a slow and longer process e.g., climate change (Nixon 2013, 6–9). Nixon also explains that many politicians and voters treat environmental action as critical yet not urgent consequently being in a state of stagnation (Nixon 2013, 9). This theory is important to pay attention to when analysing the Abe government's assessment of the climate change issue in terms of setting climate change goals at the COP21 and implementing energy policy. The same goes for public support or opposition to 'Abenomics', since as Paul Burstein explains, public responsiveness is increasing when it comes to the 'salience' of certain policy implimentation (Burstein 2003, 34). This underscores the reasons for also paying attention to public responsiveness to 'slow violence' when analysing the influence of 'Abenomics' on policymaking.

Methodology

In this research paper, I will use a mixed method approach of quantitative data such as opinion polls and qualitative source material such as journal articles. Using a mixed-methods approach enables me to understand complex phenomena qualitatively as well as to explain phenomena through numbers, charts, and basic statistical analyses quantitatively (Creswell 1999, 455).

I will start this research paper by explaining the term ‘Abenomics’, what its general agenda is and what ‘Abenomics’ means in terms of energy policy and climate change goals. I will then continue by describing what the Paris Agreement is and what has been agreed on in it. I will analyse Japan’s role in this agreement, with a focus on Japan’s climate change goals and how ‘Abenomics’ has influenced the decision-making. After that, I will focus my analysis of the energy policy on three distinct electric power sectors: coal-based fossil fuel energy, nuclear energy, and renewable energy. I will analyse how ‘Abenomics’ and its growth objective have shaped policymaking in the different energy sectors in the post-Fukushima era. To better understand how the economic growth objective of ‘Abenomics’ has influenced climate change goals and energy policy, I will analyse the public response to policy implementations. I will do this based on quantitative data from three different opinion polls, conducted by three different survey organisations. Then I will discuss how political economy and ‘slow violence’ has shaped the political consensus wherein ‘Abenomics’ exist. In the end, I will be able to conclude my proposed research question.

For an explanation of the abbreviation used in this research paper please refer to the Appendix 1. I will use data provided by other academic sources or opinion surveys, for visualisation purposes of the collected and used data and the original Japanese version please refer to the Appendix 2.

‘Abenomics’

Before analysing how ‘Abenomics’ has affected climate change goals and energy policy, I will in the following section define the term ‘Abenomics’. ‘Abenomics’, as described by scholars and politicians, generally refers to policies that facilitated economic growth and were installed by former prime minister Shinzō Abe after coming into office in 2012. In terms of energy policy, scholars such as Trevor Incerti and Phillip Y. Lipscy describe them as a set of policies designed to support the economic objectives of ‘Abenomics’, with relatively little regard for popular opinion or environmental consequences (Incerti and Lipscy 2018, 610). This also aligns with Kameyama’s definition that ‘Abenomics’ prioritize the stimulation of economic growth before anything else (Kameyama 2016, 138). Abe himself defines its mission in a speech at the New York Stock Exchange in 2017 as breaking down any “*walls*”[1] that stand in

[1] Jap. Orig. ”壁” (Abe 2017, 1)

the way of Japan's economic growth (Abe 2017, 1). To sum it up, 'Abenomics' firstly prioritizes economic growth before anything else, consequently, issues such as climate change automatically become second priority. Abe also makes it clear at the COP21 that reduction targets will be achieved without sacrificing economic growth (Japanese Government Delegation 2015, 13).

The Paris Agreement

According to the website of the UNFCCC, the Paris Agreement is a legally binding international treaty on climate change. It was adopted by 196 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016 ("The Paris Agreement | UNFCCC" n.d.). The overarching goal of the agreement is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and make efforts to limit the temperature increase to 1.5°C above pre-industrial levels (UNITED NATIONS 2015, 3). The latter 1.5°C reduction target was especially urged by small island states and African countries (Clémençon 2016, 7–8). However, even though the UNFCCC claims it to be legally binding, the INDCs each country has to submit are individually and voluntarily targets (Clémençon 2016, 13).

Japan's Role in Paris

In Paris 2015, Japan as one of the G7 countries, 3rd largest economy and 5th biggest climate polluter (Friedrich et al. 2023), participated actively in discussions and tried to position itself as a leader in climate change mitigation, while simultaneously ensuring economic interests. Apart from prime minister Shinzō Abe and Minister of the Environment Tamayo Marukawa other officials from relevant ministries participated in the conference. In a document published by the Ministry of the Environment, they position Japan as a leading figure in climate change mitigation and diplomatic discussions at the COP21 (Japanese Government Delegation 2015, 3–5). Abe expresses in his speech at the COP21 that Japan will continue to be among the leading nations in climate change mitigation, which will be achieved through Japan's technological advance and without sacrificing economic growth (Japanese Government Delegation 2015, 13), correlating to the political agenda of 'Abenomics'. Kameyama points out that Japan was generally satisfied with the outcome of the agreement. Japan was in favour

of the participation of all countries, the voluntary nature of the INDCs, a periodic review of progress for all countries and the JCM system to acquire emission credits from other countries (Kameyama 2016, 157–58). For Japan's INDCs, it has pledged a 26% emissions reduction by 2030 in comparison to 2013 levels, which it says is a reduction of 25.4%. However, the selection of 2013 as the base year has been criticized as inadequate and painting Japan's reduction headlines in a better light (Clémençon 2016, 16; Incerti and Lipscy 2018, 630). Despite Japanese officials' claim to be leading climate change mitigation, Clémençon and Kameyama undermine this claim. They firstly argue that the agreements made were preferable for most of the other developed countries and secondly compared to other countries' reduction targets, Japan's appeared rather unambitious (Clémençon 2016, 16; Kameyama 2016, 157–58). Furthermore, Japan's energy mix outlined in its INDC still heavily relied on fossil fuel energy (approx. 56%), making achieving its reduction goals more challenging ("Japan's INDC" 2015).

Abe's Energy Policy

To answer how 'Abenomics' has affected energy policy and climate change goals at the COP21, I will analyse three different aspects of energy policy: coal-based fossil fuel energy, nuclear energy, and renewable energy.

Coal-based Fossil Fuel Energy

The 2011 Fukushima incident exacerbated Japan's energy situation by sharply increasing the country's dependence on imported fossil fuels (Incerti and Lipscy 2018, 629). On 11 April 2014, the Abe cabinet decided to approve the new BEP as the foundation for Japan's new energy policy. Coal was acknowledged as the cheapest source of energy and was expected to be further utilized by introducing highly efficient technologies and sought to export high-efficiency coal power plants (Kameyama 2016, 142–43). This correlates with the objective of 'Abenomics' since a cheap energy price and export of power plants would benefit Japan's economic growth. It also aligns with aspects of Abe's speech at the COP21 that Japan will achieve its reduction goals through technological advancement (Japanese Government Delegation 2015, 13). The growth strategy of 'Abenomics' also accelerated the construction of fossil fuel power plants; for example, the government reduced the environmental assessment period for newly constructed power plants from three years to one (Incerti and Lipscy 2018, 630). Due to policies like this Japan ranked 58th out of 61 countries in the Climate Change Performance Index's report for 2016. The report also states that national experts criticise the

promotion of coal-fired power plants (Burck, Marten, and Bals 2015, 6). Such critiques are for example the ENGO Kiko Network that condemns Japan's plan of building new coal-fired power plants (Japan Press Weekly 2015). In coherence with the above Takeshi Kuramochi explains that new coal-fired power plant construction would jeopardize the achievement of both mid-term and long-term climate change mitigation goals. Especially without strengthening the CO2 emissions guidelines on new coal-fired power plants (Kuramochi 2015, 1330). Coal has been regarded as a cheap energy source and has therefore been favoured by the 'Abenomics' economic growth objective. However, without stricter regulations or cut downs on coal energy will it be challenging for Japan to achieve its mid-term and long-term climate change goals. Furthermore, the Abe government has been criticized for its reliance on coal energy to achieve economic growth.

Nuclear Energy

The Fukushima accident made nuclear energy questionable as a safe and sustainable energy source for Japan. On the eve of March 11, 2011, Japan had 54 nuclear reactors generating nearly one-third of its total electricity supply, evidence of how dependable Japan has been on nuclear energy (Kingston 2019, 105). In addition, before the incident, the government had planned to construct additional plants to meet 50% of Japan's electricity demand and achieve a 25% reduction in GHG emissions below the 1990 level by 2020 (Kameyama 2016, 130), which was set in the "*Bill of the Basic Act on Global Warming Countermeasures*" in 2010 by the DPJ (Sasaki 2010, 1364). After the meltdown, these plans had to be revised, although only partly. Despite public opinion against nuclear energy after the 3.11 Fukushima incident, the LDP reinstated it in the Basic Energy Plan in 2014 by the LDP (Kingston 2019, 103) and embraced a pro-nuclear policy platform (Incerti and Lipscy 2018, 620). This corresponds with the agenda of 'Abenomics', since nuclear energy provides a relatively stable and cheap source of energy in the short and medium term, even though longer-term concerns about safety remain debatable.

Another factor that played a key role in why Japan reversed to the status quo before the incident, was the strong influence of pro-nuclear interest groups also known as the 'nuclear village' ('*genbatsu mura*') as Jeff Kingston explains (Kingston 2019, 103–4). Japanese businesses, especially the influential Japanese business federation '*Keidanren*', were in favour of reinstalling nuclear energy, since it provided cheap energy prices, thus was more profitable and contributed to economic competitiveness (Incerti and Lipscy 2018, 621). To reinstate nuclear

energy into Japan's energy mix, the LDP under Abe has pushed to reverse or limit some regulations on nuclear energy that have been imposed after the disaster. They for example immediately after coming into power in December 2012 abolished the after the disaster established Energy and Environment Council. The council's purpose was to eliminate the METI's control over national energy policy. The LDP however placed the METI back in charge and removed anti-nuclear members of the METI's Advisory Committee for National Resources and Energy (Incerti and Lipscy 2018, 624–25). From the above, it becomes evident how the economic objective of 'Abenomics' has influenced nuclear energy policy and its reinstalment.

Aside from being a profitable source of energy and interest groups' influence, climate change reduction targets also influenced the rehabilitation of nuclear energy. For Japan to achieve its carbon reduction goals it had to re-install nuclear energy facilities (Kameyama 2016, 159–62). Therefore, nuclear energy makes up to approx. 22-20% of the energy mix outlined in Japan's INDC ("Japan's INDC" 2015). The reinstalment of nuclear energy provides a good showcase of how the 'Abenomics' policy framework has prioritised the objective of economic growth, before other issues such as environmental or public opinion. It illustrates how interest groups such as the 'nuclear village' influence policymaking. However, it also proves how complicated it is to implement policies that contribute to economic growth while simultaneously promoting environmental safety and achieving climate change reduction targets.

Renewable Energy

Another aspect of energy policy under the Abe administration is renewable energy. Before 2011 renewable energy such as solar and wind power (excluding large-scale hydropower) supplied merely 1% of electricity, which was significantly lower than other developed countries e.g., EU approx. 14,4% as of 2010 (Kameyama 2016, 165; Eurostat 2023). The share of renewable energy has increased in Japan's energy mix, but in comparison to for example the EU it remains well below (Appendix 2, Fig. 1).

The Japanese government stated in its BEP for 2014 that it will do its best in promoting renewable energy in the future (METI 2014, 107). A measure to promote renewable energy was the feed-in tariff system, which was introduced in July 2012 by the former DPJ government. The feed-in tariff is a system that encourages the adoption of renewable energy by allowing electricity generated from renewables to be sold back into the grid at an above-market rate

(Incerti and Lipscy 2018, 617). The LDP government, however, states in its energy plan that renewable energy and the fed-in tariff system have increased and will further increase energy prices for consumers (METI 2014, 101). This development is in opposition to the objective of 'Abenomics' since it could stagnate economic growth due to higher energy prices for businesses and consumers. The LDP revised the feed-in-tariff system in June 2016, which resulted in renewable power generation becoming more difficult and less lucrative (Incerti and Lipscy 2018, 617). Kuramochi points out that between April 2012 and July 2014, 12 GW of new renewable power capacity became operational and the new installation applications approved by METI during the same period were as high as 72 GW. Compared to the total national renewable power capacity of around 20 GW before the feed-in tariff, this is a significant increase (Kuramochi 2015, 1328). Despite these numbers, the LDP decided to seemingly not further support the feed-in tariff and by that also neglected to promote alternative ways of boosting renewable energy. An explanation for this behaviour could be the increase in energy cost for consumers which has been a key factor in the public support for the Abe government, as I will further discuss below.

On the other hand, hydrogen fuel cells caught the interest of Abe and gained governmental support. In December 2013, METI established a Council for a Strategy for Hydrogen and Fuel Cells (CSHFC) to advise on the implementation of a hydrogen society policy. The CSHFC drafted a roadmap that would chart a path toward a hydrogen society and unveiled it to the public on June 23, 2014 (Behling, Williams, and Managi 2015, 213). Also, Abe called the opening of Tokyo's first hydrogen fueling station in 2015 "*the dawn of a true hydrogen society*". In addition, his government paid generous subsidies of about ¥3m ($25,000) per fuel-cell vehicle (each cost as of 2015 around ¥7m), showcasing his support for hydrogen energy (*The Economist* 2015). The reason for this support can be predominantly explained by the economic profit that investment in this energy sector could offer. Japanese car manufacturers Toyota and Honda are at the forefront of fuel cell technology. Governmental investments would ultimately benefit Japanese automakers and enhance their competitiveness in the global fuel cell market, hence contributing to economic growth (Incerti and Lipscy 2018, 619). Since it aligns with the objective of 'Abenomics' it makes sense for the policymakers to support hydro-cells. The overall political attitude towards renewable energy has resulted in a share of approx. 22-24% renewable energy in Japan's INDC ("Japan's INDC" 2015). This indicates a rise in renewable energy use to achieve reduction targets, but if this share will prove sufficient remains debatable.

Through the above examples, it becomes clear where the priorities of the Abe government lay and how 'Abenomics' has affected renewable energy policy.

Opinions on Energy Policy and Climate Change Goals

After having analysed three different aspects of energy policy, it is important to also analyse public opinion on the matter of energy policy and climate change goals under the Abe administration. By looking at opinion polls a quantified image of how the public reacts to policy implementation can be discovered. Because politicians depend on voter's support public opinion polls can serve as a guideline in policy implementation (Kameya 2018, 81–82).

The JES Voting Behaviour Research Group has launched several surveys on Japanese public opinion on a variety of political issues. In an internet survey in January 2016, 2733 participants were asked what their thoughts on 'Abenomics' were and which of the following ideas was closest to their view (Yoshiaki Kobayashi et al. 2016).

The options were as followed:

> *"A: I appreciate it since the performances of export companies improved and stock values went up by issuing large amounts of government bonds and leading to a weaker yen.*
> *B: I do not appreciate it since the price of import goods rose and the debt of government increased by issuing large amounts of government bonds and leading to a weaker yen."*[2] (Yoshiaki Kobayashi et al. 2016)

The majority of respondents (58,6%) had a negative attitude towards 'Abenomics' and were dissatisfied with its economic impact (Ibid.). Regarding questions about satisfaction with the government and support for it, 54.8% of the respondents were dissatisfied in some way and a majority of 59.1% did not support the Abe government (Ibid.). Even though not a great majority, but still most of the respondents had a negative opinion of the Abe government and 'Abenomics'. These numbers can provide a general and quantified idea of public opinion on 'Abenomics'. However, they are still limited by various factors, since they lack specification and don't mention energy policy directly in the question. To get a more specific idea of public response to energy policies we can look at an RDD telephone survey conducted by the NHK in 2013 with 1.655 responses. On the matter of "*What do you think should be the most increased energy source in the future?*"[3], 67% choose the option "*Renewable energy such as solar and wind power*"[4] (NHK 2013). When it came to what respondents thought was most important

[2] (For Japanese Orig. please see Appendix 2, Question 1)
[3] (For Japanese Orig. please see Appendix 2, Question 5)
[4] (For Japanese Orig. please see Appendix 2, Fig. 6)

regarding energy generation 30,1% chose safeness, 24,5% chose environmentally friendly and 16,8% chose low electricity prices (Ibid.). This shows a general prioritizing of the respondents in terms of energy policy, which is not entirely coherent with the objective of 'Abenomics' which prioritizes economic growth and low energy prices. In contrast to the above opinions, should it be noted that a majority of 42,8% agreed on Abe's intent to review the DPJ proposed nuclear energy shutdown in 2030 and a majority of 41% agreed that if energy prices go up, nuclear energy should not be reduced (Ibid.). Also, the JES internet survey indicates that 51,7% of the respondents viewed "*stabilising the economy*"[5] as the most important national goal in the next 10-15 years (Yoshiaki Kobayashi et al. 2016). Showing that even though many people are in favour of sustainable energy sources, the issue of high energy prices and economic stability remains a constraint.

In terms of reduction targets and the Paris Agreement a survey conducted by the Cabinet Office in 2016 (1.816 respondents) shows that a majority is interested in climate change (87,2%) and has heard of the Paris Agreement by name (52,6%). On the other hand, only 7% knew the content of the agreement and 39,5% didn't know about the agreement at all. Furthermore, 62,7% of the respondents knew that Japan has a GHG reduction target, but only a few knew about the specific 26% reduction by 2030 (Government Information Office 2016). It is apparent that people in Japan are aware of global warming, the Paris Agreement, and general reduction targets. However, when it comes to the specific details and content of these concepts, the majority lacks sufficient knowledge.

Most respondents from the above surveys are in favour of renewable energy and don't see energy prices as the most important factor compared to safeness and environmental friendliness. However, if energy prices would increase, they would be willing to postpone the nuclear shutdown (NHK 2013). Hence though a majority in opinion polls are not necessarily in favour of 'Abenomics', voting results remain without significant change. This argument can be underlined by the voting results from the e.g., 2014 Election for the House of Representatives where the LDP gained 48,1% vote support (IFES Election Guide n.d.). Furthermore, survey groups of 2.733 or 1.665 might not be a 100% representative group, compared to 103.962.784 voters that were registered at the 2014 election (IFES Election Guide n.d.). The opinion polls show that people are concerned with issues that would immediately affect their livelihood and

[5] (For Japanese Orig. please see Appendix 2, Fig. 5)

prioritize these things. ‘Abenomics’ fosters economic growth and has implemented policies that keep energy prices low thus immediately affecting people’s lives.

The Political Consensus

As stated in the above theoretical framework, James A. Caporaso and David P. Levine explain that the economy is unavoidably political and that political economy refers to the imposition of political agendas on the economy (Caporaso and Levine 1992, 3–5). This theory highlights the role of the economic factor in policymaking, aligning with the agenda of ‘Abenomics’ as policies predominantly focus on the economy and the objective of economic growth. The ‘Abenomics’ energy policies have also been in favour of economic interest groups. In 2015 ‘*Keidanren*’ published a commentary on Japan’s energy mix suggesting that it should consist of 60% fossil fuel, 25% nuclear, 10% hydro and geothermal, and 5% from other renewables (Kameya 2018, 163). By comparing this proposition with Japan's energy mix outlined in its INDC, it is evident that the interest group’s desires were largely met, with a marginal shift from nuclear energy (20-22%) and fossil fuel energy (56%) towards an increase in renewable energy (22-24%) (“Japan’s INDC” 2015). The same goes for policy measures to mitigate GHG emissions, which have been largely deprioritized, except in cases where support would benefit the Japanese economy (Incerti and Lipscy 2018, 612). These examples prove the influence economy and economic interest groups have on political decision making such as determining climate change goals and energy policy. The observation can be supported by political scientists that analyse policy implementation that is perceived to be overly responsive to the political demands of the elite e.g., interest groups (DeGroff and Cargo 2009, 52–53).

The objective of ‘Abenomics’ is to immediately boost economic growth, it does so through deregulation and policy implementation that have little concern for long-term environmental effects. Equally is the public most likely to respond to policy implementation that would immediately affect them and is also seemingly less concerned about long-term issues. These trends can be explained by the phenomenon of ‘slow violence’. Nixon explains that many politicians and voters treat environmental action as critical yet not urgent consequently being in a state of “*yes, but not yet*” in terms of taking action against ‘slow violence’ (Nixon 2013, 9). It is also coherent with as DeGroff and Cargo state, the complexity of contemporary social problems, along with implementation structures, often makes attributing longer-term outcomes

and results to a particular policy difficult, if not impossible (DeGroff and Cargo 2009). Abe has expressed in his speech at the COP21 that his cabinet will view the climate change matter as the "*most important subject*" [6], clearly indicating his awareness of climate change (Japanese Government Delegation 2015, 13). However, when it comes to the Abe government's above-analysed regard for climate compared to economic matters. Economic growth matters now, while the effects of climate change are 'slow violence', where effects are delayed. Therefore, it is difficult for policymakers and voters alike to relate to the threat of climate change and take long-term actions.

Conversely, there also exist industry groups that either urge the government to take more action in combating climate change or promote the action themselves e.g., the Japan Climate Leaders' Partnership (JCLP). In 2015 The JLCP published a press release urging the government to set more ambitious GHG reduction targets. They state that Japan should "*break with fossil fuel dependent economic growth and instead focus on solving the climate change issue*"[7] (Japan-CLP 2015). In contrast to the policy course of the Abe administration, the JCLP suggests that the government should set more ambitious reduction targets and implement incentives e.g., carbon pricing, to achieve them. They also claim that new low-carbon markets would create a virtuous economic circle and contribute to Japan's future prosperity (Ibid.). However, as already analysed before and stated by the government in its BEP 2014, renewable energy is still regarded as a more expensive energy source compared to coal or nuclear energy, making it less attractive for businesses and consumers.

From the above opinion polls, it is eminent that the public favours renewable energy. However, when it comes to energy prices and economic stability, all things that directly affect their way of living, most people are in favour of Abe's political agenda. Burstein explains that public responsiveness is increasing when it comes to the 'salience' of certain policy implications (Burstein 2003, 34). This argument aligns with Nixon's explanation of voters' behaviour to 'slow violence'. Incerti and Lipscy have observed that Abe has been willing to pursue policies unpopular with the public, but only in cases, such as nuclear restarts and the construction of new coal-fired plants, where the policies would lower energy costs (Incerti and Lipscy 2018,

[6] Jap. Orig. "最重要課題" (Japanese Government Delegation 2015, 13)
[7] Jap. Orig. "しかし、化石資源に依存した経済成長から脱皮し、気候変動問題を解決することは、国際社会に課せられた大命題である。" (Japan-CLP 2015)

612). Higher or lower energy prices impact consumers' livelihoods and thus explain public support for the policies of 'Abenomics'. Additionally, a governmental opinion poll shows that a majority is aware of measures to fight climate change such as the Paris Agreement and reduction targets (Government Information Office 2016). However, they lack knowledge about the specific content of the agreement and cannot deem if the reduction targets set are sufficient (Ibid.). This results in an insufficient amount of opposition- or protest voters that would urge politicians to respond by e.g., setting more ambitious reduction targets or promoting renewable energy. Furthermore, it allows 'Abenomics' to continue affecting climate change goals that are favourable to the objection of economic growth.

Conclusion

In conclusion, my analysis conducted in this paper sheds light on: "How has the economic growth objective of 'Abenomics' shaped Japan's climate change goals at the COP21 in Paris 2015 and energy policy in the aftermath of the 3.11 Fukushima incident?". 'Abenomics' is driven by the agenda of economic growth, which caused a prioritization of energy policies that stimulate economic growth. Additionally, Japan's climate change goals have been criticized as rather unambitious, which can be due to the fact, as Abe himself claims in his speech at the COP21, that climate change mitigation will be achieved without sacrificing economic growth. 'Abenomics' has prioritized economic growth before implementing energy policies and establishing effective GHG reduction targets to mitigate climate change.

The overarching goal of the Paris Agreement is to hold the increase in the global average temperature to well below 2°C above pre-industrial levels and make efforts to limit the temperature increase to 1.5°C above pre-industrial levels. While Abe presents Japan as a leader in climate change mitigation at the COP21, scholars such as Clémençon and Kameyama undermine this claim.

When it comes to energy policy implemented in the years after the Fukushima incident (2011) and up until the Paris Agreement (2015), economic growth has been prioritized by policymakers. Due to the periodic shutdown of nuclear power plants, reliance on coal energy increased. Coal energy is viewed as a cheap energy source and it contributes to market competitiveness, hence 'Abenomics' interest in supporting it which, however, has been

criticised by ENGOs and scholars. The Fukushima incident created a debate about the safety of nuclear energy. Abe however in correlation to the growth objective of ‘Abenomics’ has promoted the reinstating of nuclear energy into Japan’s energy mix, a position favoured by nuclear interest groups. Apart from being a relatively cheap energy source is another argument for the promotion of nuclear energy that it can be used to achieve Japan’s climate change goals. Even though, the Abe government has stated in its BEP 2014 that it will further promote renewable energy has Japan’s renewable energy share been relatively low in part due to higher energy prices and less lucrative options for economic growth. Abe has shown interest in hydrogen fuelling cells, which can be explained by the lucrative opportunities and prospect of economic growth that hydro-cells provide.

Opinion polls analysed in this paper reveal a quantifiable dissatisfaction with the Abe government and 'Abenomics', while renewable energy is preferred as a future energy source. However, immediate matters such as economic stability and low energy prices are prioritized by the public. The public also lacks knowledge about concrete governmental measures to fight climate change and specific numbers of reduction targets set at the COP21. Allowing ‘Abenomics’ to face limited opposition from the voters.

The discussed theories of political economy and ‘slow violence’, provide a theoretical framework that explains the political consensus enabling ‘Abenomics’ to shape energy policy and climate change goals. ‘Abenomics’ exemplifies the interdependence between political agendas and economic matters. ‘Slow violence’ explains the prioritization of immediate matters by the government and the voters such as lower energy prices and a stable economy. It also explains the difficulty of assessing long-term threats, which is coherent with Burstein’s explanation that public response increases when it comes to ‘salience’. ‘Abenomics’ has shaped energy policy and climate change goals based on a prioritization of economic growth. What consequences this has on future generations and policymaking will be relevant to discuss in future research.

Bibliography

Abe, Shinzō. 2017. “Ｎ Ｙ証券取引所 総理挨拶 [Address by the Prime Minister at the New York Stock Exchange].” Ministry of Foreign Affairs of Japan. https://www.mofa.go.jp/mofaj/files/000291966.pdf.

Behling, Noriko, Mark C. Williams, and Shunsuke Managi. 2015. “Fuel Cells and the Hydrogen Revolution: Analysis of a Strategic Plan in Japan.” *Economic Analysis and Policy* 48 (December): 204–21. https://doi.org/10.1016/j.eap.2015.10.002.

Briggs, Helen, and Esme Stallard. 2023. “COP27: Why Is the Paris Climate Agreement Still Important?” *BBC News*, February 11, 2023, sec. Science & Environment. https://www.bbc.com/news/science-environment-35073297.

Burck, Jan, Franziska Marten, and Christoph Bals. 2015. “The Climate Change Performance Index - Results 2016.” GERMANWATCH & CAN. https://www.germanwatch.org/sites/germanwatch.org/files/publication/13626.pdf.

Burstein, Paul. 2003. “The Impact of Public Opinion on Public Policy: A Review and an Agenda.” *Political Research Quarterly* 56 (1): 29–40. https://doi.org/10.2307/3219881.

Caporaso, James A., and David P. Levine. 1992. *Theories of Political Economy*. Cambridge University Press.

Clémençon, Raymond. 2016. “The Two Sides of the Paris Climate Agreement: Dismal Failure or Historic Breakthrough?” *The Journal of Environment & Development* 25 (1): 3–24. https://doi.org/10.1177/1070496516631362.

Creswell, John W. 1999. “Chapter 18 - Mixed-Method Research: Introduction and Application.” In *Handbook of Educational Policy*, edited by Gregory J. Cizek, 455–72. Educational Psychology. San Diego: Academic Press. https://doi.org/10.1016/B978-012174698-8/50045-X.

DeGroff, Amy, and Margaret Cargo. 2009. “Policy Implementation: Implications for Evaluation.” *New Directions for Evaluation* 2009 (124): 47–60. https://doi.org/10.1002/ev.313.

Drazen, Allan. 2002. *Political Economy in Macroeconomics*. Princeton University Press.

Eurostat. 2023. “Share of Energy from Renewable Sources.” https://ec.europa.eu/eurostat/databrowser/view/NRG_IND_REN__custom_6504699/default/table?lang=en.

Friedrich, Johannes, Mengpin Ge, Andrew Pickens, and Leandro Vigna. 2023. “This Interactive Chart Shows Changes in the World’s Top 10 Emitters,” March. https://www.wri.org/insights/interactive-chart-shows-changes-worlds-top-10-emitters.

Government Information Office. 2016. “「地球温暖化対策に関する世論調査」の概要 [Summary of the ’Public Opinion Survey on Global Warming’].” Japan: Government Information Office, Cabinet Office. https://survey.gov-online.go.jp/h28/h28-ondanka/gairyaku.pdf.

IFES Election Guide. n.d. “IFES Election Guide | Elections: Japan House of Representatives 2014.” ElectionGuide DEMOCRACY ASSISTANCE AND ELECTION NEWS. Accessed May 31, 2023. https://www.electionguide.org/elections/id/2821/.

Incerti, Trevor, and Phillip Y. Lipscy. 2018. “The Politics of Energy and Climate Change in Japan under Abe: Abenergynomics.” *Asian Survey* 58 (4): 607–34.

Japan Press Weekly. 2015. “Japan’s Plan to Build 48 New Coal-Fired Power Plants Contradicts Global Efforts to Combat Climate Change.” *Japan Press Weekly*,

November 27, 2015. https://www.japan-press.co.jp/modules/news/index.php?id=8759.

Japan-CLP. 2015. “日本の温室効果ガス削減目標に対する意見書 [Opinion on Japan’s greenhouse gas reduction targets.].” Japan-CLP. 3517. https://japan-clp.jp/archives/3517.

Japanese Government Delegation. 2015. “国連気候変動枠組条約第２１回締約国会議 (COP21) [21st Conference of the Parties to the United Nations Framework Convention on Climate Change].” Ministry of the Environment. https://www.env.go.jp/content/900497816.pdf.

“Japan’s INDC.” 2015. Ministry of the Environment. https://www.env.go.jp/content/900451275.pdf.

Kameya, Patti. 2018. “Changing Attitudes: Public Opinion and Politics.” In *Japanese Contemporary Politics*. Routledge.

Kameyama, Yasuko. 2016. *Climate Change Policy in Japan: From the 1980s to 2015*. London: Routledge. https://doi.org/10.4324/9781315733920.

Kingston, Jeff. 2019. “Japan’s Nuclear Village: Power and Resilience.” In *Critical Issues in Contemporary Japan*, 2nd ed. Routledge.

Kuramochi, Takeshi. 2015. “Review of Energy and Climate Policy Developments in Japan before and after Fukushima.” *Renewable and Sustainable Energy Reviews* 43 (March): 1320–32. https://doi.org/10.1016/j.rser.2014.12.001.

METI. 2014. “エネルギー基本計画 [Basic Energy Plan].” Ministry of Economy, Trade and Industry. https://www.enecho.meti.go.jp/about/whitepaper/2014pdf/whitepaper2014pdf_1_3.pdf.

NHK. 2013. “原発とエネルギーに関する意識調査 [Survey on attitudes towards nuclear power and energy.].” RDD telephone survey. https://www.nhk.or.jp/bunken/summary/yoron/social/pdf/130523.pdf.

Nixon, Rob. 2013. *Slow Violence and the Environmentalism of the Poor:* Cambridge, MA: Harvard University Press.

Sasaki Koichi. 2010. “地球温暖化を巡る国内外の動向 [Status of International and Japan for Global Warming Tackling].” *JAPAN TAPPI JOURNAL* 64 (12): 1362–67. https://doi.org/10.2524/jtappij.64.1362.

The Economist. 2015. “Betting on Hot Air,” May 9, 2015. https://www.economist.com/asia/2015/05/09/betting-on-hot-air.

“The Paris Agreement | UNFCCC.” n.d. Accessed April 1, 2023. https://unfccc.int/process-and-meetings/the-paris-agreement.

UNITED NATIONS. 2015. “PARIS AGREEMENT.” https://unfccc.int/sites/default/files/english_paris_agreement.pdf.

Yoshiaki Kobayashi, Shoki Taniguchi, Mayu Yamada, Hiroshi Hirano, Ryota Natori, and Ken Iida. 2016. “JESV 第 12 波調査（2015 年平常時インターネット調査) [2015 Public Consciousness Non-electoral Survey (Internet Survey)].” 特別推進研究 [Specially promoted research]. https://74c239b9-16ce-4eaa-b4b8-06d7a78dfd1d.filesusr.com/ugd/18542c_e6fb669a45a04819bce020c0c0dcb194.pdf.

Appendix 1

Below is a list of all the abbreviations used in my research paper in alphabetical order. I also included a short explanation when found necessary.

BEP: Basic Energy Plan - Refers to Japan's basic energy policy framework.

CSHFC: Council for a Strategy for Hydrogen and Fuel Cells - A council established to advise on the implementation of a hydrogen society policy.

COP: Conference of the Parties - Refers to the annual sessions of the United Nations Framework Convention on Climate Change.

CO2: Carbon Dioxide

DPJ: Democratic Party of Japan

ENGO: Environmental Non-Governmental Organization

EU: European Union

G7: Group of Seven

GHG: Greenhouse Gas - Refers to gases that contribute to the greenhouse effect and climate change, such as carbon dioxide (CO2) and methane (CH4).

GW: Gigawatt

INDC: Intended Nationally Determined Contributions - Refers to the voluntarily commitments made by countries under the Paris Agreement to reduce greenhouse gas emissions.

JCLP: Japan Climate Leaders' Partnership - A group of businesses and organizations in Japan focused on addressing climate change.

JCM: Joint Crediting Mechanism - A mechanism under the UNFCCC that allows countries to earn credits for greenhouse gas emission reductions achieved through projects in developing countries.

JES: Japanese Electoral Studies – A Japanese survey organisation.

LDP: Liberal Democratic Party

METI: Ministry of Economy, Trade, and Industry

NHK: Japan Broadcasting Corporation (‘*Nippon Hōsō Kyōka*’)

RDD: Random Digit Dialing - A method of selecting survey respondents by randomly dialing phone numbers.

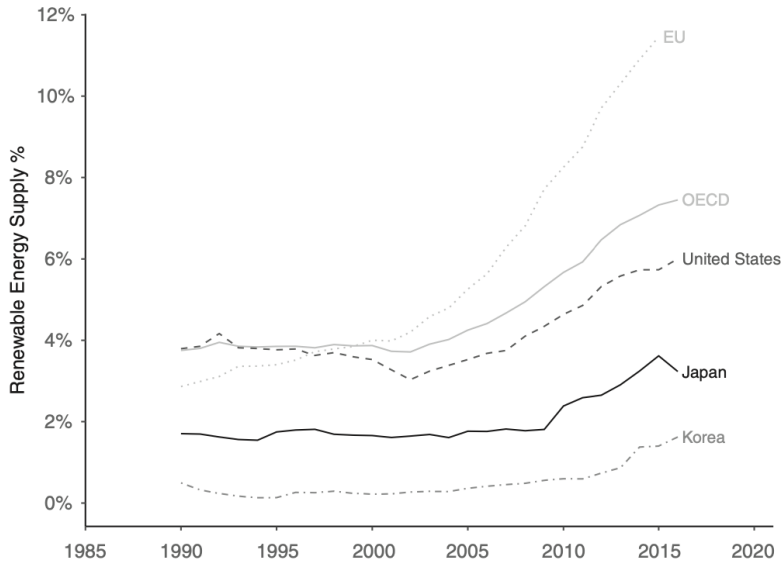
UN: United Nations

UNFCCC: United Nations Framework Convention on Climate Change - An international environmental treaty aimed at addressing climate change.

Appendix 2

This Appendix includes numbers, charts, Japanese original versions and in general data referred to in my research paper. The figures displayed here belong to the cited works and have not been created by me. English translation of the original Japanese texts has been translated by me.

Fig. 1. Cross-National Renewable Energy Share Excluding Hydropower, 1990–2017.



Source: The journal article "*The Politics of Energy and Climate Change in Japan under Abe*" written by Trevor Incerti and Lipscy (2018) (Incerti and Lipscy 2018, 614).

JES Public Consciousness Non-Electoral Survey [Internet Survey] 2015

Question 1

Q: The following are two major points of view about economic policy called Abenomics that the Abe administration has implemented. Which idea is closer to your view? (Please circle only one choice.)

A: I appreciate it since the performances of export companies improved and stock values went up by issuing large amounts of government bonds and leading to a weaker yen.

B: I do not appreciate it since the price of import goods rose and the debt of government increased by issuing large amounts of government bonds and leading to a weaker yen.

Q: 安倍内閣が行ってきたアベノミクスという経済政策について、次の A、B のような意見があります。 あなたの意見はどちらに近いですか。

A：大量に国債を発行して円安になり、輸出企業の業績が上がったり、株価が上がったりしたので、評価 することができる。

B：大量に国債を発行して円安になり、輸入製品の値段が上がったり、政府の借金が増えたりしたので、 評価することができない。

Fig. 2. Answers Question 1

	n	%
全体	2733	100.0
Aに近い	261	9.5
どちらかといえばA	872	31.9
どちらかといえばB	1019	37.3
Bに近い	581	21.3

(Yoshiaki Kobayashi et al. 2016)

Question 2

Q: How much are you satisfied or dissatisfied with the current politics? (Please circle only one choice.)

Q: あなたは、現在の政治に対してどの程度満足していますか。

Fig. 3. Answers Question 2

	n	%
全体	2733	100.0
かなり満足している	54	2.0
やや満足している	373	13.6
どちらでもない	809	29.6
やや不満である	732	26.8
かなり不満である	765	28.0

(Yoshiaki Kobayashi et al. 2016)

Question 3

Q: Do you support the Abe administration? (Please circle only one choice.)

Q: あなたは安倍内閣を支持していますか。

Fig. 4. Answers Question 3

	n	%
全体	2733	100.0
かなり支持している	222	8.1
やや支持している	895	32.7
あまり支持していない	884	32.3
ほとんど支持していない	732	26.8

(Yoshiaki Kobayashi et al. 2016)

Question 4

Q: Which one do you think is the most important as a national goal when we think about ten or fifteen years later? (Please circle only one choice.)

Q:この先 10 年、15 年くらいを考えた場合のわが国の国家目標としては、この中のどれを一番重くみるべきだと思いますか.

Fig. 5. Answers Question 4

	n	%
全体	2733	100.0
国内の秩序を維持する	309	11.3
政策決定に国民の声を反映させる	780	28.5
経済を安定させる	1412	51.7
言論の自由を守る	232	8.5

(Yoshiaki Kobayashi et al. 2016)

NHK: Survey on attitudes towards nuclear power and energy 2013

Question 5

Q: What do you think should be the most increased energy source in the future?

Q: あなたは、今後発電に使うエネルギー源は、何を最も増やすべきだと思いますか。次に読み上げる６つの中から、１つ選んでお答えください。

Fig. 6. Answers Question 5

1. 石油	·····	1.6 %
2. 石炭	·····	0.7 %
3. 天然ガス	·····	11.0 %
4. 水力	·····	6.3 %
5. 原子力	·····	6.3 %
6. 太陽光や風力などの自然エネルギー	·····	67.0 %
7. その他	·····	2.2 %
8. わからない、無回答	·····	4.8 %

(NHK 2013)

Question 6

Q: Some people argue that if electricity prices are going up, nuclear power should not be reduced. Do you agree? Do you disagree? Please answer by choosing one of the four options below

Q:「電気料金が上がるなら、原子力発電を減らすべきではない」という意見があります。あなたは、そう思いますか。そうは思いませんか。次に読み上げる４つの中から、１つ選んでお答えください。

Fig. 7. Answers Question 6

1. 大いにそう思う	·····	11.0 %
2. ある程度そう思う	·····	41.0 %
3. あまりそう思わない	·····	26.0 %
4. まったくそう思わない	·····	17.0 %
5. わからない、無回答	·····	5.0 %

(NHK 2013)

Question 7

Q: Prime Minister Shinzō Abe has indicated that he intends to review the Democratic Party of Japan's (DPJ) energy policy, which states that it aims to achieve "zero operation of nuclear power plants in the 2030s." Do you agree with the review? Do you oppose it? Or are you undecided?

Q:「２０３０年代に原発の稼働ゼロを目指す」とした民主党政権のエネルギー政策について、安倍総理大臣は、見直す考えを示しています。あなたは、見直しに賛成ですか。反対ですか。それともどちらともいえませんか。

Fig. 8. Answers Question 7

1. 賛成	·····	42.8 %
2. 反対	·····	22.1 %
3. どちらともいえない	·····	30.6 %
4. わからない、無回答	·····	4.5 %

(NHK 2013)

Cabinet Office “Public Opinion Survey on Global Warming” 2016

Question 8

Q: Are you concerned about global environmental issues such as global warming, depletion of the ozone layer and tropical deforestation? Or are you not interested? Please answer only one of these questions.

Q: あなたは，地球の温暖化，オゾン層の破壊，熱帯林の減少などの地球環境問題に関心がありますか。それとも関心がありませんか。この中から１つだけお答えください。

Fig. 9. Answers Question 8

	平成 28 年 8 月
・関心がある（小計）	**87.2%**
・関心がある	40.4%
・ある程度関心がある	46.8%
・関心がない（小計）	**12.6%**
・あまり関心がない	10.1%
・全く関心がない	2.4%

(Government Information Office 2016)

Question 9

Q: Are you familiar with the Paris Agreement, the new international framework for greenhouse gas reductions and other measures adopted at the COP Cop 21 international conference held in Paris, France, last year? Please answer just one of these questions.

Q: あなたは，昨年，フランスのパリで開催された国際会議「ＣＯＰ コップ２１」で採択された，温室効果ガス削減などのための新たな国際的な枠組みである「パリ協定」を知っていますか。この中から１つだけお答えください。

Fig. 10. Answers Question 9

・知っている（小計）	**59.6%**
・内容まで知っている	7.0%
・名前は聞いたことがある	52.6%
・知らない	**39.5%**

(Government Information Office 2016)

Question 10

Q: Did you know that Japan has a medium-term target to reduce greenhouse gas emissions by 26 per cent in 2030 compared to 2013? Please answer only one of these questions.

Q: 日本では，2030 年度には，温室効果ガス排出量を 2013 年度に比べて 26 パーセント削減するという中期目標を掲げていることを知っていましたか。この中から 1 つだけお答えください。

Fig. 11. Answers Question 10

・知っていた（小計）	**62.7%**
・目標の数値も含めて知っていた	17.7%
・目標があることは知っていたが，数値までは知らなかった	45.0%
・知らなかった	**36.6%**

(Government Information Office 2016)

Bibliography

Government Information Office. 2016. “「地球温暖化対策に関する世論調査」の概要 [Summary of the ’Public Opinion Survey on Global Warming’].” Japan: Government Information Office, Cabinet Office. https://survey.gov-online.go.jp/h28/h28-ondanka/gairyaku.pdf.

Incerti, Trevor, and Phillip Y. Lipscy. 2018. “The Politics of Energy and Climate Change in Japan under Abe: Abenergynomics.” *Asian Survey* 58 (4): 607–34.

NHK. 2013. “原発とエネルギーに関する意識調査 [Survey on attitudes towards nuclear power and energy.].” RDD telephone survey. https://www.nhk.or.jp/bunken/summary/yoron/social/pdf/130523.pdf.

Yoshiaki Kobayashi, Shoki Taniguchi, Mayu Yamada, Hiroshi Hirano, Ryota Natori, and Ken Iida. 2016. “JESV 第 12 波調査（2015 年平常時インターネット調査) [2015 Public Consciousness Non-electoral Survey (Internet Survey)].” 特別推進研究 [Specially promoted research]. https://74c239b9-16ce-4eaa-b4b8-06d7a78dfd1d.filesusr.com/ugd/18542c_e6fb669a45a04819bce020c0c0dcb194.pdf.