

How can political  
geography make  
sense of energy  
policy?



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## How can political geography make sense of energy policy? – The case of Germany and the Energiewende

In light of political instabilities, climate change and concerns about the availability of natural resources, there is a compelling need for nations to undergo an energy transition (Hake, et al., 2015). Announced by the German government in 2011, the Energiewende, or energy transformation aims to cut the amount of fossil fuels used in Germany from 80% to 20% by 2050 and is one of the most well-documented examples of an energy transition (Renn & Marshall, 2016). The exact political goals of the Energiewende, however, are relatively unclear (Joas, et al., 2016). Given that much of the discourse around the Energiewende labels it as the ‘ project of the century’ and that unclear goals can lead to an ineffective outcome (Joas, et al., 2016), there is a need to make sense of this energy transformation.

Political geography as a discipline frames public issues in a geographical framing, considering space and power and as such, helps to clarify and explain otherwise enigmatic public issues (Agnew, 2002). This sub-discipline of geography is particularly applicable to energy policy given the geopolitics and power relations embedded in energy policy (Criekemans, 2011). This essay aims to apply political geography concepts and theories to energy policy in order to analyse the motivations and goals behind the Energiewende. A focus will be placed on three potential motivations behind the Energiewende with political geography used to deconstruct the significance of these.

The cutting of emissions is a pivotal element of the Energiewende as Germany contributes to the global effort to mitigate climate change. Whilst some economists recognise this as the only certain motivation behind the Energiewende (Joas, et al., 2016), the study from Joas, et al. (2016) proved otherwise as they found that the majority of the German population would think the Energiewende makes sense even in a world without climate change. This highlights that the Energiewende is regarded as much more than just a climate change mitigation tactic and there are other motivations supporting it.

Alongside the Energiewende, energy security is a topic of constant debate in Germany (Renn & Marshall, 2016). The distribution of energy resources throughout the world is far from even, resulting in flows of energy between, and through different states. Given that access to energy supplies determines, to a large extent, the state of a country's economy and national security, the importance of a secure and reliable energy supply is not to be underestimated (Shaffer, 2009). Many politicians in Germany regard energy security to be deeply embedded within the goals of the Energiewende as Germany looks to increase their percentage of energy from domestic sources (Joas, et al., 2016). 2006 marked somewhat of a critical moment in energy security for the whole of Europe as Russia's ongoing gas dispute from Ukraine resulted in the supply of gas to western Europe dropping (Duffield, 2009). Since as much as 36% of gas used in Germany is sourced from Russia (Dyson, 2016), this proved to be a major flashpoint in relations between the two nations. Across the European media, Russia was cast as the culprit in this supply scare but, since Germany's dependence on Russian gas was so

high, the German government were cautious in their approach and their rhetoric, careful to avoid blaming a nation that could use energy as a weapon against them (Duffield, 2009). It is also not just the supply nations that deploy this geopolitical weapon; transit countries have also, with notable examples being seen in Ukraine and Belarus, who have disrupted flows of gas in efforts to attain various political and economic goals (Shaffer, 2009).

Such events display the potential vulnerability of German energy policy and consequently, German foreign policy (Shaffer, 2009). Dyson (2016) claims that German dependence on Russian gas has resulted in the European Union holding less geopolitical power over other nations, particularly Russia. In the example of Russian military incursion into Ukraine, the EU responded with economic sanctions on Russia. It is particularly striking to note that Germany has been active in their efforts to restrict these sanctions (Dyson, 2016). It is possible that this is the result of dependence on Russian gas and demonstrates how Russia is using energy as a weapon in order to pursue various economic and political goals. It is, therefore, the dependence of nations, not the presence of the resource itself, that allows energy to be weaponised.

In recent years, the rhetoric surrounding “Energieaußenpolitik” or energy foreign policy became more common as the linkage of domestic and foreign policy through the medium of energy became more realised (Duffield, 2009). This was perhaps why chancellor Merkel, albeit briefly, decided to scrap plans to abandon nuclear power, an important domestic source of energy (Hake, et al., 2015). Indeed, Germany has sought to diversify energy transit <https://assignbuster.com/how-can-political-geography-make-sense-of-energy-policy/>

routes and has done so through the construction of the Nordstream pipeline which runs from Russia to Germany without any transit countries (Stefanova, 2012), meaning the supply of gas is less likely to be affected (Shaffer, 2009). Discussion of a second twin pipeline, Nordstream 2 has resulted in various different discourses in the media, with some politicians such as the energy speaker of the CDU party claiming that a second direct pipeline between Germany and Russia would boost energy security (RT, 2018). Yet Poland and the US have claimed the proposed pipeline compromises Europe's and Germany's energy security as it further increases dependence on Russia (Reuters, 2018).

Whilst the Energiewende promotes domestic sources of energy which should reduce foreign dependence, there are some concerns that Germany might even become less energy secure (Hake, et al., 2015). With nuclear power to be phased out by 2022 (Rehner & McCauley, 2016), Germany is set to lose a reliable, constant domestic source of energy which could result in electricity supply shortages as a result of dependence on weather dependent, unpredictable renewable sources (Hake, et al., 2015). It is possible that this has caused German consumption of brown coal to increase since the phase-out of nuclear power began in 2011 (Morton & Müller, 2016), as Germany looks to secure its energy supply. This increase in coal consumption once again raises questions about the political goals of the Energiewende. If the principal aim is to tackle climate change (Joas, et al., 2016), then the burning of coal is counterintuitive and perhaps displays confusion over what the aims of the Energiewende really are.

Given that the geopolitics and energy are very closely linked (Shaffer, 2009), it is of use to analyse the impact the Energiewende could have on geopolitical status and relations. A common discourse which can be identified through the speeches of Chancellor Merkel and the German media is one of Germany as a pioneer in low carbon energy transitions (Hake, et al., 2015). Indeed, the term “ project of the century” which has been coined many times by many politicians (Joas, et al., 2016), emphasises the scale of what Germany is trying to do in a somewhat self-centric way that privileges the Energiewende ahead of projects of other countries. Elements of the Energiewende have gone on to serve as exemplars for other countries such as the EEG renewable surcharge (Hake, et al., 2015). The Energiewende, therefore, is a form of hegemonic power as it has become the focus of global observation (Hake, et al., 2015).

The Energiewende represents a broader transition to renewable energy sources. Since the geopolitical positions of many nations such as Saudi Arabia and the previously discussed Russia are at least partially founded upon their abundance of fossil fuels (Criekemans, 2011), it is possible that a shift to renewable energy sources could change the geopolitical positions of nations. Criekemans (2011), proposes that nations such as Germany, that have become pioneers of renewable energy technologies, will benefit geopolitically and could hold more power in the future. This could be attributable to the continued growth in renewables, particularly photovoltaics, diminishing fossil fuel resources and a compelling need to mitigate climate change.

This essay has so far engaged with challenges at the national and supranational level, particularly when investigating energy security. The domestic scale, however, is also of great importance in helping to explain the motivations and challenges of the Energiewende. Indeed, political relations within Germany, have greatly shaped the Energiewende (Hake, et al., 2015) and there is no better example than the 'Atomausstieg', otherwise known as the phase-out of nuclear power. According to Hake, et al. (2015), German opposition to nuclear power began in the early 1970s and following the Three Mile Island nuclear accident in 1979, political demonstrations and pressure groups such as Friends of the Earth Germany influenced the creation of a whole new political party; the Green party in 1980 (Hake, et al., 2015). Even at this early stage, social movements had been successful in influencing energy, something that was quickly becoming a foreign policy issue (Hake, et al., 2015).

For many years, Germany's abundance of lignite and use of nuclear power allowed them to be a net exporter of electricity, exporting to neighbouring countries such as Austria, Belgium and The Netherlands (Holzer & Le Anh Tuan, 2015). Buchan (2012) reports that the Energiewende is set to turn Germany from a net exporter to a net importer of energy. As previously discussed, this will increase Germany's dependence on energy from other countries, possibly causing security problems. However, there is growing concern emanating from neighbouring countries that the Energiewende will have effects far outside of Germany. France and the Czech Republic, two countries that have historically imported energy from Germany, have expressed concerns about how the Energiewende will affect the electricity

price in their home markets (Buchan, 2012). This is likely to not only influence the energy policies of Germany's neighbours but also provide ammunition for heightened geopolitical tensions (Buchan, 2012).

The transition to an increasing amount of renewable energy sources has posed difficulties and challenges for the German energy network. The increase in wind power, in particular, has resulted in electricity spilling over into bordering countries, thus disrupting their energy grids (Buchan, 2012). The Netherlands and Poland have adopted a protectionist mentality in response to their energy supply being threatened by placing phase shifting transformers on the German border (Buchan, 2012).

This essay has attempted to apply political geography to the German Energiewende in order to provide insight into the associated motivations and challenges. Aside from climate change, perhaps one of the biggest motivations behind an energy transition in Germany is due to concerns about energy security, particularly given that a secure energy supply is vital to the economy and national security (Shaffer, 2009). The extent to which Germany is dependent on Russian gas is so high that it is somewhat inhibiting Germany's willingness to back economic sanctions on Russia. This has allowed Russia greater freedom to use energy as a weapon to pursue their economic and political goals. This essay has also engaged with some of the confusion surrounding the goals of the Energiewende as highlighted by Joas, et al. (2016). The fact that Germany is willing to increase their use of the domestic resource lignite, a highly polluting fossil fuel, identifies that energy security could well be the dominant motivation behind the Energiewende.

Aside from energy security, it was proposed that geopolitical status was also a motivation of the Energiewende, with Germany being articulated as a pioneer of low carbon energy transitions. Criekemans (2011) also highlighted how the geopolitical positions of states could change as a result of the growing influence of renewable energy sources. Also analysed was the role that pressure groups and social resistance played, particularly with regards to the Atomausstieg through the creation of the Green party and the German population voting strongly on energy issues. Finally, given that the Energiewende has been termed the project of the century by some (Joas, et al., 2016), it is inevitable that such a project would create new political challenges. The transition of Germany from an energy exporter to an importer as well as the impact on energy networks poses new challenges for the relations between neighbouring countries.

Word Count: 1997/2000

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