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**An exploration of cross-national variation in response to the classification of nuclear energy as a green energy in the EU Taxonomy: The case of Austria vs. Finland**

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An exploration of cross-national variation in response to the classification of nuclear energy as a green energy in the EU Taxonomy: The case of Austria vs. Finland

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## Introduction:

Energy has always been a sensitive topic in Europe. Even historically, one can see the reluctance of member states to give up their energy autonomy. This hesitation can be clearly seen when the inclusion of a separate energy chapter in the Treaty of Maastricht (1992) was refused, with several member states rejecting it. Article 192 of the TFEU ratified the policy that respected said reticence by reminding us that despite the constant evolution of energy policy, “*such measures shall not affect a Member State’s right to determine... its choice between different energy sources and the general structure of its energy supply.*” Due to the current geopolitical situation, how member states choose to supply their energy is already a discussion. It becomes even more relevant when one considers that nuclear energy and gas have been labeled ‘green’ transition energies, according to the EU taxonomy, which has caused an uproar from certain member states (The New York Times, 2021).

More precisely, the EU Commission recently presented a *Taxonomy on Complementary Climate Delegated Act* concerning climate change mitigation and an adaptation that covers certain gas and nuclear activities within the Taxonomy. The EU Taxonomy is a response to the UN 2030 agenda, which is the global sustainable development framework that covers the three main dimensions of sustainability: economic, social, and environmental. The Paris agreement was built on the 2030 agenda and its goal is to be able to implement the goals set out in the 2030 agenda on the EU level as well as making climate change a more visible player when it comes to investments.

In December 2019, the European Council and the European Parliament reached a political agreement on a proposed text called the Establishment of a Framework to Facilitate Sustainable Investment, also known as the “Taxonomy Regulation.” The Taxonomy Regulation was established to create a common framework to help businesses and investors utilize a common language to identify to what extent certain economic activities can be classified as environmentally sustainable. The goal is to “provide clarity and transparency on environmental sustainability to investors, financial institutions, companies, and issuers thereby enabling informed decision-making in order to foster investments in environmentally sustainable activities” (Overview of the Taxonomy, 2020). The EU Taxonomy Regulation defines an environmentally sustainable economic activity as environmentally sustainable if it makes a substantial contribution to certain environmental objectives, the most important amongst them are: climate change mitigation, the sustainable use of resources, and moving towards a circular economy. If an economic activity harms the environment more than it benefits it, it shouldn't be considered environmentally sustainable (Overview of the Taxonomy, 2020).

On 6 July, the European Parliament released a statement regarding the vote on the Complementary Delegated Act on climate change mitigation and adaptation covering certain gas and nuclear activities. It stated, “This vote is important recognition of our pragmatic and realistic approach in helping many Member States on their transition path towards climate neutrality. Climate neutrality is our objective and legal obligation. We are committed to using all available tools to move away from high carbon-emitting energy sources.” The Commissioner in charge of Financial Services, Financial Stability, and Capital Markets Union, Mairead McGuinness said: “I welcome the outcome of this vote. The Complementary Delegated Act is a pragmatic proposal to ensure that private investments in gas and nuclear, needed for our energy transition, meet strict criteria. Investments in renewables is already prioritized in our Taxonomy - this is our future. Our

proposal ensures transparency so investors will know what they are investing in. Today brings much needed clarity to the EU position” (European Commission, 2022). This press release conflicts with what different member states have said about the delegated act, specifically in regard to gas and nuclear energy being mentioned in the same breath as climate neutrality (The New York Times, 2021).

The disagreement between member states about whether nuclear energy should be classified as green energy and included in the EU taxonomy was described as “COP26’s quiet conflict” by The New York Times (2021). Environmental ministers from Germany, Denmark, Portugal, Austria, and Luxemburg condemned the classification of nuclear energy as green. On the other hand, a group of ten EU ministers (Bulgaria, Croatia, Czech Republic, Finland, France, Hungary, Romania, Slovakia, and Slovenia) came out in strong support of the classification of nuclear energy being ‘green’ (DW, 2021). To observers, some member state positions were more surprising than others. The reason for this is that the positions of some of the member states did not align with existing assumptions on the impact of partisan politics, which is that that conservative government are supposed to be strong supporters of nuclear energy while progressive governments are supposed to oppose its use (Belsley & Oh, 2014, Nelkin, 1980, Kuklinski et al, 1982, etc.).

Given the strength of this assumption in the literature, it was particularly surprising to see Finland among the supporters and Austria among the opponents of the classification of nuclear energy as green. After all, Finland is known as a left-progressive society and was governed by a left-wing coalition at the time, while Austria is known as a more conservative society and was governed by a green-red coalition. Perhaps even more surprising was the vigor with which the two governments defended their positions. Austria pointed to the financial costs associated with nuclear energy as well as the dangers associated with it. Gregor Schusterschitz, the Austrian Ambassador to the EU, said, “We think that it would be wrong to raise nuclear energy as an alternative – it is not cheap and it is not secure. The prices for production of nuclear energy are much higher than that for photovoltaic solar production” (Taylor, 2021). Austria’s energy and climate minister, Lenore Gewessler, stated that Austria would be ready to challenge the decision by taking it to the European Court of Justice. According to Gewessler, “There is no legal basis for including nuclear power in the EU taxonomy. If the EU taxonomy includes nuclear energy we are ready to challenge that in court.” This statement was a rather stark contrast to the response coming from Finland, where Mika Lintilä, the Finnish Minister of Economic Affairs, stated that “nuclear power plays an important role in achieving Finland’s carbon neutrality targets. The taxonomy must encourage sustainable investment and accelerate the green transition” (TEM twitter, 2021). The fact that both of these countries, which are known to generally operate carefully and take a nuanced position on matters of EU policy, come out so forcefully and with so much fervor in favor of their positions is surprising indeed. The purpose of this thesis is to explain the positions of these two countries. The research question is therefore: “*What factors have caused Austria to be anti-nuclear energy in the EU Taxonomy and Finland to be pro-nuclear energy in discussions on the EU Taxonomy?*”.

The goal of the thesis is thus to understand what caused Austria and Finland to take what seem like unexpected positions in regard to the classification of nuclear energy as a green energy source within the EU Taxonomy. To do so, the following chapter builds on the existing literature on the politics of energy policy to propose various possible explanations for this variation. It will

focus on three factors: interest groups dynamics, politics dynamics, and cultural factors. The chapter will explain how these factors may explain the observed difference and how this can be substantiated. In the following, empirical, chapter, the cases of Austria and Finland will be evaluated individually to see if the above listed explanations are appropriate in helping to understand the cross-national variation between the two countries. The method which will be used is process tracing. Mainly primary sources will be used in the form of tweets, press statements, news articles, op-eds, surveys, EU Regulations, and Parliamentary debates. By not neglecting primary sources we are able to see how the conversation around nuclear energy and the green taxonomy evolves over time. Secondary sources are used buttress the primary sources and to also understand the academic context in which the conversation is taking place. All sources are in one of three languages: German, English, or Finnish. As I am a native German speaker, the only language which required translation are those in Finnish. The Finnish sources are translated using a professional translation software called DeepL PRO, the translations are also looked over by a native Finnish speaker to see if the translations align. Overall, the goal is to understand the differentiating features of each country and to see if they are aligned with what can be found in the literature to contribute to the discussion of how cross-national variation particularly in the energy policy sphere is created and maintained in Europe. This may prove to be particularly useful as we enter into a period of energy re-evaluation due to the current energy crisis Europe is experiencing.

### Theoretical Chapter:

As explained in the previous chapter, the question of what caused the differing stances between Finland and Austria remains unanswered by the existing literature. The question of the classification of nuclear energy as a 'green transition' energy is recent, thus there is not yet

substantial literature on the subject. Existing studies have, however, tried to explain variations in past energy policies and orientations among European countries; moreover, mostly based on an analysis of Germany and France, existing studies have presented various theoretical frameworks to explain cross-national variation in policy stances regarding the use of different types of energy. From the existing literature, three of the most relevant factors have been selected for the purposes of this thesis: the role of respective interest groups, cultural factors, and political dynamics. This analysis builds on these explanations by investigating to what extent each of these three pre-selected categories are applicable in the case of Austria vs. Finland. It is important to note that I do not expect to find one single explanation or cause for the variation in opinion between Austria and Finland. I also expect there to be a certain amount of overlap between sections as none of the selected factors exist in silos, nor are they immune to other influences. As the introduction has shown and the theoretical and empirical section will reinforce, mono-causality does not exist, especially on a topic as complex as energy policy and as emotional as nuclear energy. In this chapter, I will outline how each of these factors may possibly explain the previously observed variation in policy stances between Austria and Finland.

#### Interest group involvement:

Over the past decade, environmental policy has been the single most lobbied policy field across the globe. On the one hand, there has been a reckoning among private firms that climate policies are among the most significant contemporary policy decisions that will affect them in regard to their work, their profits, and potentially even their existence. At the same time, more and more NGOs consider it their core mission to fight climate change. While nuclear energy might be considered to be a low-salience issue for the general public, for energy firms and NGOs it is a matter of extreme importance. Currently, in Germany, Great Britain, France, and the Netherlands, twenty percent of all interest group activities target environmental policy, which clearly shows how important energy policy is for both NGOs and private companies and industry (Boehler et al., 2022 ). As a result, we can expect interest groups to have played a major role in shaping government attitudes on the classification of different energy types.

In the literature pertaining to interest group systems, there has been a persistent concern with the diversity of the interest groups who are lobbying (Baumgartner and Leech 1998; Beyers et al. 2008). A biased pattern of representation (an uneven balance in the lobbying representation) could prove problematic as it means that there could be interests that have an amount of influence that is not proportional to their interests in society (Lowery and Gray 2004; Lowery et al. 2013). The empirical chapter will examine whether there is an uneven amount of representation in Austria for anti-nuclear energy. This could make sense, as the cost of pro-nuclear lobbies to enter or maintain their position in the political arena may be too costly. The fact that Austria is now taking the Commission to the ECJ over the Taxonomy may be a sign of an unbalanced representation. Worse, it may mean that Austria is going to court over something that its constituents may not even consider that important.

The 2022 paper by Boehler et al argues that influence isn't necessarily based on the persuasiveness of an argument but rather on the size and number of groups of the mobilization for or against the adoption of climate policies. The existing literature reinforces the link between the size of advocacy camps and their respective influence (Baumgartner et al., 2009; Duer et al., 2015; Hadden, 2015; Mahoney & Baumgartner, 2015, etc.). In Boehler et al. 2022, he defines

lobby camps as “interest groups who share a common policy position” (pg. 964). The importance is in the fact that they may or may not work together, however, they are associated with each other since they are on the same side of the policy debate. They are all aiming to convince the political decision-makers to side with them. Generally speaking, in the lobbying arena pertaining to climate policies, there are two camps. One lobby camp is clearly in favor of climate policies, mainly consisting of environmental NGOs and private companies that have a vested interest in the renewable energy market. On the other hand, the lobby camp opposed to climate policies feels a direct threat from the implications of proposed legislation. Those most active in opposing climate policies are the fossil fuel industry and companies that rely heavily on cheap energy. This makes sense: The entire business model of companies that rely on cheap energy would crumble if they can no longer access it. As Finland already has an existing nuclear infrastructure, for it this argument becomes null and void. Furthermore, for Austria the establishment of hydropower is so far advanced that many companies were able to efficiently switch to hydropower as a cheap energy source (Reuters, 2022).

The above literature brings up four main points that are important to keep in mind when exploring the variation between the positions of Austria and Finland within the category of interest group dynamics. First, interest groups are important and they have a vested interest in the outcomes of environmental policy. The literature has shown that it is not just NGOs lobbying for environmental policy (now the most lobbied policy field in the world) but also industry. Second, the balance of interest groups is important to consider. If there is a biased pattern of representation then the outcome of the lobbying will evidently fall more in line with the stronger lobby. Third, it is important to mind industry and their energy needs as they will lobby in accordance with their needs. Finally, mobilization is a determining factor. The more groups engage with decision makers the more decision makers are willing to respond to their demands.

In Finland, as already mentioned, the forestry industry is a strong source of influence in the political landscape. Nuclear power has been present in the energy policy conversation because energy producers were willing to heavily invest in it due to the special relationship between the state and the forestry (industry) market. The national economy depends on the export industry and the energy intensive industry has significant political influence. The forestry industry in Finland consists of mechanical (timber) and chemical (paper and pulp). Finland is one of the world’s largest producers of pulp, paper and cardboard, and one of Europe’s largest producers of sawn timber. The industry employs over 160,000 people in Finland, is valued at 20,7 billion euros and accounts for almost a quarter of all Finnish exports. The influence of the industry cannot be overstated (Salo, 2015). Litmanen and Kojo write that one institutional arrangement of this relationship can be seen in the legal-administrative alliance between the state and the Finnish nuclear power industry. The alliance is based on “the argument that the normative structure of a strong administrative state, like Finland, provides tools for protecting the continuity of the pro-nuclear policy” (Litmanen & Kojo, 2011, p. 174). The alliance between the forestry industry, the nuclear industry and the state is a cornerstone of Finnish energy policy. On the other hand, Greenpeace, the Finnish Society for Nature and Environment, Friends of the Earth, the Nature League, and the Finnish Association for Nature Conservation are quite active. However, despite their demonstrations post-Fukushima, the Finance Minister and the Prime Minister all issued statements saying that neither Fukushima nor the peaceful demonstrations would impact Finland’s nuclear power decisions (Yle, 2011). In Finland, it can be seen that the forest industry



is disproportionately influential as it is more than an interested private group but rather a well-established state sponsored alliance and is very reliant on cheap energy which nuclear energy can provide. It is therefore possible that the forestry industry played an important role in maintaining the relevance and perceived importance of nuclear energy in Finland.

Austria, by contrast, lacks a major industry on which it is dependent and which is as influential as the forestry industry in Finland. The Austrian NGO prevalence has been well established since the 1970s when grassroots organizations organized themselves to halt the establishment of the nuclear power plant. A referendum was called in 1978, and 50.5 percent of Austrian voters voted against the peaceful use of nuclear power in Austria, particularly relating to the Zwentendorf Nuclear Power Plant. Although it was already built, the nuclear power plant was never turned on. Industry wise, Austria doesn't have an equivalent of the Forestry Lobby in Finland. Germany is Austria's closest and historically main trading partner. In Austria, the anti-nuclear energy lobby is stronger — this can be seen through the results of referendums and the fact that there isn't one explicit lobby (besides the industrial lobby at large) to counteract the sensitivities to the German market. Thus, due to being close trading partners and Germany's sway, where Germany goes, Austria is likely to follow. I expect in the following section to discover that anti-nuclear NGOs play a much stronger role in Austria than in Finland as they have already historically shown that they play a large role. This can be illustrated by the fact that the anti-nuclear NGOs helped secure a no vote in the nuclear energy referendum in the 70s.

In my view, interest group dynamics in reference to cross-national variation can be viewed in two ways: private lobby power in Finland and NGO organization in Austria. Essentially, one of the reasons why Finland's private lobby was able to stay the power of NGOs is because they have multiple levers to pull when negotiating with the government — mainly the economic structure in which the country is set up. While nuclear energy was and is very regulated, Finnish industry — specifically the traditionally strongest manufacturing sector, the forestry industry — was extremely eager to build reactors and to expand nuclear power despite regulations. Economically speaking, Finland's macroeconomic positioning reflected a need for nuclear energy. The country has no coal, oil or gas resources. Furthermore, the country suffers from a harsh and cold climate and a low population density which lead to high energy consumption, high per capita heating and transport costs. Beyond that, Finland has a history of producing energy-intensive goods, powered in particular by the forestry industry (Jensen-Eriksen, 2020, p.1415). Thus, not only was Finnish industry negotiating for its own needs but in many ways also appealing to the Finnish government's common sense. Not only are they dependent on the most remunerating industries to contribute to the social contract which in Finland is extensive, they are also dependent on cheap energy to move and heat their constituents. Beyond that, the forestry industry is a key employer, and nothing paves the way to a failing economy and political turnover quite like unemployment. In many ways, regardless of the ethical or environmental questions that Finnish NGOs raise in regards to nuclear energy, no argument is strong enough to counteract all the levers upon which Finnish industry is able to play.

NGO organization in Austria is in my view one of the key factors which allowed them not only in many ways to 'win' the referendum but also which prevented future attempts at nuclear energy. The ability to organize, as well as the understanding of what it takes to sway the people, proved to be a powerful tool. Politicians are at the mercy of their electorate, and when NGOs know how to harness the populace to support their causes, politicians also find themselves in

dynamics where they too can be dependent on NGOs. Furthermore, Austria had the blueprint of how to effectively lobby against nuclear energy thanks to their German colleagues who were vital in the energiewende in Germany.

If the NGO organization is indeed a key factor then we should see evidence of an influence group like the forestry industry for example. I would expect to see references to the forestry industry in media/broader debate in Finland, while I would not expect to see it in Austria. I would not expect to find any joint statements between the Finnish government and the forestry industry, but rather indirect evidence like references to the interests of the forestry industry in Finland and not in Austria. On the other hand, in Austria, I would expect to see stronger mobilization of the anti-nuclear energy NGOs. This could be in simple media references, or in politicians meeting with NGOs or street mobilizations. I would also expect to see more references of the green movement in the press. Additionally, I would also expect the wording to be quite strong as the thing which is most interesting about the cross national variation between Austria and Finland is the intensity with which Austria is against the classification of nuclear energy as a green energy. What makes the intensity of Austria even more interesting is the fact that it continues despite the fact that Germany has accepted the classification of nuclear energy and is not taking the matter to the ECJ.

#### Cultural factors:

Another possible explanation for the cross-national variation between Finland and Austria may lie in the concept of path dependency. Adrian Kay categorizes path dependency this way: "If initial moves in one direction elicit further moves in that same direction; in other words, the order in which things happen affects how they happen; the trajectory of change up to a certain point constrains the trajectory after that point" (Kay, 2005, p. 1). Path dependency is an explanation for differing history which leads to differing public opinion which leads to differing culture. While cultural factors can and will be evoked, culture is incredibly difficult to quantify. However, to discount societal factors is to discount the arena in which this conversation is being had. Society is fundamentally the arena in which cross national variation takes place. It seems clear that society is deeply influenced by path dependency, even when the definition is as simple as, 'choices have consequences'.

Jackle and Bauschke (2011) suggest that cross-national variation in regard to stances toward nuclear energy can be partially explained by the influence of culture and socialization. More and more, the public is playing an important role in the implementation of energy projects (as seen in Haggett 2011; Valentine & Sovacool, 2013; Wustenhagen, Wolsink & Burer, 2007). A healthy democracy exists to carry out the will of the people and it is beholden to its constituency. More and more people are becoming sensitized to the issue of climate change as younger people — who most directly feel that they will suffer the consequences of climate change — are able to vote. Policy will follow voter preference and will address the issues which the electorate has deemed important. It seems clear that both Austria and Finland understand the real danger climate change poses. The difference is in how they think it should be solved. For example, Finland, proud of its technical and economic prowess, sees nuclear energy as a source of clean energy which will be able to efficiently 'power' the energy transition and dramatically reduce CO2 emissions. It would make sense that this is what Finland believes as this is what the country has shown its constituents for the past 50 years.

Whitfield and his colleagues (2009) argue that the driving factors of one's positioning towards nuclear energy are based on trust and values, both factors that are very dependent on socio-demographic factors (Pampel, 2011). Another factor mentioned by multiple studies is geographic distance from a nuclear power plant. For individuals, the perceived risk becomes lower as the distance from the identified danger decreases. However, there are also other studies showing that people who live near a working nuclear power plant are actually less critical of nuclear energy than those who don't (Eiser, Pligt & Spears, 1995; Greenberg 2009, etc). Nuclear Power Plants (NPPs) are often significant job providers in rural settings, which could allow for lower critical attitudes, tied in part to a community's economic dependence on the plant. Furthermore, nuclear meltdowns are few and far between, thus people living close could be shown the benefits on a daily basis without being confronted with the danger. This affects public opinion on nuclear energy. What you are exposed to shapes your opinion. We all weigh risks on a daily basis — risk avoidance manifests itself in what we like, what we know and what we understand, and we are afraid of the unknown. A country that lives with nuclear energy and views it as a cheap energy source, a key to increased energy independence and an economic motor is more likely to have a positive view on it than a country where nuclear energy isn't a part of daily life and where policy has been opposed to it for over the past 30 years.

To circle back to path dependency, I would like to offer up two examples which highlight how path dependency can shape culture. First is the example of Austria's referendum on Nuclear Energy in 1978. In Austria, public concern began as the government started to show a greater interest in nuclear energy. In 1975, a citizen group in Upper Austria managed to obtain 60,000 signatures on a petition to stop the NPP from going live. This put the Austrian government in a bit of a bind; many politicians were convinced of the fact that due to growing energy demand it would be impossible to meet the energy requirements without the help of nuclear energy, however, based on the petition it was clear that not every Austrian was on board. Austria had already made an initial commitment to nuclear energy which was hailed by electrical firms, industry, and trade unions to be a good idea. The question became how to continue on the path of pursuing nuclear energy without violent protests ensuing which has already been seen in France and in other countries when governments choose to pursue Nuclear Energy. Thus, the Federal Chancellor at the time, Dr. Bruno Kreisky decided to outsource the issue to parliament for a final decision where it was decided that the issue would go to the people and that there would be a referendum (Pelinka, 1983, p. 255). On November 5<sup>th</sup>, 1978 voters were asked whether they would approve a law allowing for the peaceful use of nuclear power. This was specifically in reference to the nuclear power plant which had already been built. Voters narrowly rejected the referendum with 50.5% of the vote. Voter turnout for the referendum was at 64.1% consequently, the already built nuclear power plant was never operated and has since been demolished. (Bundesgesetzblatt für die Republik Österreich, 1978). Thus, the country was put on a path where it was known that Nuclear Energy wouldn't play a role as it had been rejected by voters. It can be politically very complicated to re-lance a discussion which was rejected by voters in a direct vote (often seen as the truest form of democracy). To reinforce the idea of nuclear free Austria post referendum, the "Atomsperrgesetz" was passed which was a simple law blocking nuclear energy in Austria. A federal constitutional law for nuclear free Austria was passed in 1999 and the "Atomsperrgesetz" was promoted to constitutional status (Volksbegehren "Atomfreies Österreich"). Thus, in the 10 years following the referendum a strong anti-nuclear energy foundation was established.

The second example of path dependency is how in Finland nuclear energy was treated on a policy level. There were formal rules which put in place actual procedures for the building of new nuclear power plants. Litmanen and Kojo uses Arts and van Tatenhove (2004) *rules of the game* to explain how rules are used “to define the way the game should be played: which norms are legitimate – how issues may be raised, agendas set, interests articulated, and policies formulated.” (Litmanen and Kojo, 2011, p. 175). In Finland, the procedures of the Nuclear Energy Act of 1987, Decree of 1988, and the Act on Environmental Impact Assessment gave political legitimacy to the subject of nuclear energy by establishing rules of the game, the government implicitly illustrated that nuclear energy is a legitimate energy source which will be used to secure as much energy independence as possible. From the 1980s, Finland has been considered nuclear energy to be a legitimate energy source. The path taken with nuclear energy was strong enough to stay the course even during moments of rejection and to continue on said path.

In conclusion, in the following section, while not discounting the influence of risk avoidance, physical distance, and public opinion in the cultural factors of nuclear energy. All of these can be explained through path dependency. Two countries for a variety of different factors went down different paths and the resulting decisions continue to push each country further down said path. As already mentioned, cultural factors are extremely difficult to pinpoint. However, I would expect to see in the next section that path dependency continues to play a vital role and that neither Finland nor Austria end up altering their positioning regarding nuclear energy. For this point to be true, I would expect references to Finland continuing to support Nuclear energy or maybe even making a statement about even further investment into nuclear energy. I would expect from Austria the opposite, I would expect continued references to the dangers of nuclear energy and then I would expect further statements opposing nuclear energy, I would also expect public opinion regarding nuclear energy to stay low.

#### Political Dynamics:

Another possible explanation for the observed policy differences between Austria and Finland lies in political dynamics, political dynamics are often invoked to explain cross-national variation in policy decisions (for example; which party is in power, coalition dynamics, etc.). I expect partisan governments to be an unlikely explanation as one of the core questions of this thesis is why nuclear energy is supported by a left wing government in Finland vs a Conservative government in Austria. This is due to the fact both Austria and Finland have not significantly changed their political party since the 1950s. Thus, Austria has always been more politically conservative than Finland. However, their views of nuclear energy are completely opposite. Since the 2019 Austrian election, the Green party has been in a governing coalition with the OVP with the position of Minister of Environment going to a green party member. While this may explain the need of Austria to voice their discontent with the classification, it still doesn't explain the vehemence with which it has been done. There are other European countries with governing Green parties which don't have nuclear reactors who are not suing over the matter, like Ireland for example, where the green party is in the governing coalition. Thus, while in conjunction with the previously two explored sections; interest group dynamics and socio-cultural factors political dynamics can help to explain cross national variation, it is unable to be the sole justification. What it does prove is that history

and politics is messy and nothing as complex as nuclear energy and cross national variation will seamlessly fit into one box. History rarely wraps us things nicely and neatly in a bow.

#### Complexity and interdependence:

At this point in the thesis, what is known is that Austria and Finland have positioned themselves (surprisingly) not based on the traditional ideology of their governing parties. Essentially, Finland is governed by a traditional left party government, left parties are typically associated with a strong environmental orientation and an opposition to nuclear energy (Hess & Renner, 2019, p.419). However, in Finland this is not the case, its governing left party is pro-nuclear energy. The same, but in the opposite sense is true for Austria. This is particular. While politics are vital in how policy is proposed, implemented, and applied, politics are as any area, subject to external and internal factors which may not have a direct link to nuclear energy at all. From the literature the two main points to keep in mind when it comes to political dynamics are important and how a political party identifies itself is vital. Within the sphere of politics there are two main subjects which are of importance: national security interests and the promotion of market competition as these are also what voters are most concerned with (Hess & Renner, 2019, p.420).

Most of the academic papers published in regard to energy policy and the associated politics underline the importance of national security interests in the politics of energy. Hughes & Lispcy (2013) to reinforce his hypothesis cites Morgenthau (1963, p.115) who defines control over natural resources as a central element of national power in both peace and wartime; Gilpin (1981) who supposed that resource competition is a vital driver in determining state behavior (p. 455). He finds that policymakers pursue interests such as promoting market competition and a more general approach to foreign policy goals. This would make sense as in many ways energy policy can be seen as the way in which the economy is powered thus it is essential for it to be selected in a way which promotes market competition. In regards to Morgenthau's supposition on natural resources being a central element of national power - this is clearly supported by history. Germany's annexation of Austria had a deep and lasting impact on the energy industry in Austria and post WWII Austria lacked the capital to rebuild the damaged hydro plants nor to build new ones. However, thanks to the Marshall Plan (also known as the European Recovery Program) financial aid to get the projects up and running was granted and allowed the hydro plant industry to continue to evolve. Currently, Austria's hydropower has a share of 38.6%, but more than 60% of Austria's energy needs must be imported (IEA, 2020). The energy market of Austria is defined by deep trade relations with neighboring countries, in particular Germany, Switzerland, Czech Republic, and Slovenia. These trade relations are especially important as exchanges of electricity are vital to the security of the energy supply in Austria since 2001 electricity imports are higher than exports (IEA, 2020). Thus, while history was generous to Austria in the way that the Marshall Plan allowed hydro energy to continue to develop and for the money for the infrastructure to be made available, it is still insufficient for autonomy; leaving Austria dependent on other countries, lowering its national power. As we all know, governments negotiate differently with governments upon whom they are dependent than those upon whom they are not. While this interdependence can also be argued to be what in many ways upholds civility in trans-governmental exchanges it cannot be forgotten that this is the case because of dependence.

History also plays an important role in Finnish natural resources as well and their subsequent energy choices. In the 19th century Finland also utilized significant hydropower as its two main resources were forests and water power. Within the heavily forested areas were also rapids which presented themselves useful to be harnessed and turned into hydropower for growing industrial projects. In Finland, one of the most important industries was the paper industry. Paper mills were energy heavy which is also why they were strategically placed near rapids to be able to generate the necessary energy (Kuisma, 2006). For almost 100 years in Finland, the most important branch of the manufacturing economy was the forest industry, who were of course tied to the availability of natural resources. At the end of the second world war over 30% of Finland's hydropower capacity was lost as the areas which were conducive to hydro energy found themselves in land sections which were lost to the Soviet Union ( Myllyntaus, 1991, p. 102). This also explains Finland's need to look elsewhere, thus finding nuclear energy. It cannot be forgotten that Finland, like Austria, is also still dependent on other countries for energy supplies, in particular Russia. Russia's relationship with Finland is complex and it is fair to say that Finland is wary of Russia and its intentions, which is also why nuclear energy has been so proudly accepted. Nuclear energy could be seen as an 'energy' barrier between Finland and Russia, the energy Finland is able to produce themselves is energy they don't have to import from Russia giving more independence.

#### Political parties:

Political parties are established to represent the interests of the people. Thus, the people who are voted to power - in a democracy - are the people who best represent the views of the majority. Different political parties also have different positions on energy policy. Hess & Renner (2019) state that where conservatives do support decarbonization policies they generally tend to do so for reasons such as economic, national security, or health rather than for environmental reasons. The argument of national security as well as is one that has been used by Finnish political parties which is also supported by the constituency, as a majority of Finns support the use of nuclear energy, even an increase of its use (Lappalainen, 2007). Almost half of the population sees more advantages than risks in nuclear power, while the average in Europe is at 33% (European Commission). The article by Luoma-aho & Vos (2008) found that the news reporting on the topic was positive as there had been no accidents of Nuclear Power Plants in Finland and that for the Finns energy autonomy from Russia was deemed to be of great importance. This in many regards makes sense, as in the case of Finland, when even the governing Green party doesn't have much criticism for Nuclear Energy what criticism would the more conservative party have. Thus, many Finns have grown up with nuclear energy being accepted as a fait accompli by both parties causing for more overall ease and support towards the topic.

While the definition of energy policy has expanded over the years, the initial adherence to certain policy positions has not. Government ideology is a political factor which has the potential to affect the stringency and the orientation of energy policies. Potrafke (2010) looked at the hypothesis that market oriented and right wing governments have been more involved in deregulating product markets (the energy market would fall under a product market). The empirical estimations of Potrafke do indeed illustrate that right wing governments do indeed promote deregulation of the energy market (Cadoret & Padovano, 2016, p.272). On the other hand, Chang and Berdiev (2011) along with Biressieloglu and Karabrahimoglu (2012) confirmed

that the inverse is also true, left wing governments favor regulation in the energy sector and that right wing governments endorse energy deregulation. Thus, according to the findings above, Finland should favor regulation in the energy market. The governing party of Finland is the Social Democratic Party of Finland (a center left social democratic party), it has 40 seats in Parliament and is the oldest active political party in Finland (SPD, n.d.). As the SDPF has existed for such a long time there may be a certain amount of 'grand-fathering in' of nuclear energy. The SDPF has seen over the years the advantages to Nuclear Energy, not only as an energy source, but as source of political independence from potentially hostile neighbors, to an active contributing member working in the social contract with labor unions to finance the advantages that the Finnish people expect and for which they vote. This could perhaps explain how Finland found itself in the position of a center left social democratic party supporting nuclear energy as a green energy solution and never once taking a more 'expected' approach and campaigning on the removal of nuclear power plants. On the other hand, in Austria the largest party seat is the Austrian People's Party (OVP). The OVP is considered to be a center right to right wing party (Stone, 2017). The OVP, even while being headed by a far more right-wing chairman like Sebastian Kurz, the possibility of nuclear energy was never brought up. In 2020, the OVP and the Greens formed a coalition marking the first time that the Greens had gained power in Austria. Despite the waves of corruption scandals, the OVP and the Greens still govern together. This is also the explanation for how Austria currently has a Green Minister of Climate Action, Environment, Energy, Mobility, Innovation and Technology, Leonore Gewessler. However, one would expect the influence to be mitigated to an extent as the Chancellor is the OVP and the State Secretary in the Ministry of Climate Action is also OVP. What is perplexing, as already mentioned in the interest group dynamics section is the intensity of Austria's opposition, especially since from existing literature there doesn't seem to be any sort of external pressure forcing the opposition to be so loud. Austria is actually quite alone in this venture, there seems to be only one voice speaking for Austria and against the classification of Nuclear Energy, the voice of Leonore Gewessler. With the Greens only being in power since 2020, this could in many ways become the hallmark battle of an ambitious young minister looking for name recognition and to frame her party in a way where it is seen to be the party that 'fights the good fight'. Thus, taking the matter of the classification of nuclear energy as a green energy in the EU taxonomy to the ECJ may be more a matter of domestic politicking. In conclusion, while political dynamics alone clearly doesn't explain the cross national variation we see between Austria and Finland; especially, when we look at which party is in power. When used as a factor to round out the explanations of cultural factors and interest group dynamics it can be very useful, particularly when looking at the political complexity of the subject in regard to history in both Austria and Finland. With coalition politics in mind, Austria's positioning may at first glance seem to make more sense. A young and ambitious green party in a coalition with an established conservative party who was never explicitly pro-nuclear energy after the 1978 referendum, the need to assume a strongly anti-nuclear positioning seems credible. However, what doesn't make sense is the vigor with which Leonore Gewessler is putting her country in opposition to the issue, especially when Austria's trading partners and neighbors seem to have accepted the classification of nuclear energy as a green transition energy with far less resistance. In the following section, I would expect to see a lot of references in particular to Leonore Gewessler as she seems to be the core figure/arguer against the classification of nuclear energy, I would expect this to manifest itself through tweets, public appearances nationally and in

Brussels. For Finland, I would expect SPDF to say relatively little about nuclear energy besides continuing to voice its support on a European wide level. Finland doesn't need to do nearly as much persuading as Austria. The nuclear energy is officially already classified as a green transition energy thus, Austria is campaigning against a decided matter, and beyond that, Finland isn't looking to convince other countries that they too should have nuclear power.

In conclusion, this theoretical chapter has attempted to find possible factors which could potentially explain the cross national variation we see when we look at the positions of Finland and Austria in regard to the question of classifying nuclear energy as a green energy in the EU taxonomy. From the existing literature, three factors were selected: Interest group dynamics, cultural factors, and political dynamics. With interest group dynamics it was shown that there seem to be two determining factors which need to be evaluated, private lobby power and NGO savoir faire. Cultural factors from the existing literature seem to evoke two main concepts; risk avoidance in a society and physical distance from nuclear reactors are key in public perception of nuclear energy. Furthermore, the role of path dependency may explain the cultural differences in how nuclear energy is viewed. Two examples were given – the Austria nuclear reactor referendum of 1978, and Finland absorbing nuclear energy into general energy policy thus giving political legitimacy to the topic. Lastly, political dynamics were discussed. It seems to be clear that on its own political dynamics cannot explain the cross national variation, which is also in many senses a core part of my thesis- what explains that a more left leaning government like Finland would be pro-nuclear energy when a more conservative government like Austria would be against nuclear energy, especially when the existing literature states that the opposite should be true? Political dynamics and political parties can be useful in helping to explain the other two factors.

## Empirical Chapter: Austria and Finland positioning themselves

The goal of the following empirical chapter is to explore and trace the events that led to Austria and Finland's different reactions regarding the classification of nuclear energy being classified as a green energy by the EU taxonomy. As discussed in the introduction, the EU's Taxonomy regulation has been created as a classification tool to help companies, markets and policy makers understand which economic activities are sustainable and thus worth investing in. The goal is to support the European Green Deal objectives, as well as the 2050 climate-neutrality target (Doyle, 2021). In 2018, the European Commission established the EU taxonomy. This was followed up in 2021 with the final draft of the first climate delegated act, which went into force on January 1<sup>st</sup> 2022. The following month, to clarify its positioning on nuclear and gas, the European Commission proposed a complementary delegated act on the subject of nuclear and gas, essentially proposing that if they could meet the criteria established in the Taxonomy they should be added to the energy sources defined as green energy sources. The European Parliament endorsed the proposal, which paved the way for it to become law and to start being applicable in 2023 (Abnett & Jessop, 2022). With the explicit conversations being had about nuclear energy starting in 2021, it makes sense to start our exploration there.

### Austria

Starting in 2019, the political landscape in Austria changed. IbizaGate brought down in many ways what was an Austrian house of cards when it comes to political compartment: The investigation



has continued to reveal problematic dealings and relationships within the Austrian political systems (Schultheis, 2019). IbizaGate and the collapse of the governing coalition between Kurz's ÖVP and the Freedom Party (FPÖ) proved to be the catalyst for snap elections which led to the coalition being formed between the Greens and the People's party (ÖVP). The marrying of the center-right with the ecological left was the first of its kind on a national level in Europe. This was also the first time that in Austria the Greens were part of a governing coalition. The coalition was clearly based on cohabitation rather than a common vision. Essentially each party was given ownership over their preferred policy areas: the Greens received the cabinet portfolios of health, justice, culture, and an amalgamation of a super portfolio broadly environment (climate, energy and infrastructure). The coalition has, however, also brought problems for the Greens. The ÖVP has refused to take in asylum-seeking minors from Greece, and following the terrorist attack in Vienna, the ÖVP pushed through legislation allowing Muslim organizations to be monitored (How, n.d.). Clearly, these policy wins for the ÖVP are difficult for the Greens to explain to their voter base and goes against the core of what the Greens stand for. In many ways, this pushed the Greens' environmental 'super portfolio' to the forefront, requiring incredibly strong action to illustrate to the constituency that they are contributing to the policy arena. Thus, coalition politics may help to explain the cross-national variation we see, as it seems that the above mentioned policy decisions made by the ÖVP may have challenged the legitimacy of the Greens, forcing them to double down on environmental policy as their area of political strength.

When nuclear energy was classified as a green energy, Austria was unsurprisingly very displeased. On January 1<sup>st</sup> 2021 the Austrian Minister for Climate Change and Environmental Policy, Leonore Gewessler tweeted,

*“ Die @EU\_commission hat gestern in einer Nacht- und Nebelaktion mit ihrem Vorschlag für die #Taxonomie versucht, #Atomkraft & #Gas grün zu waschen. Alleine der Zeitpunkt der Veröffentlichung zeigt schon, dass sie offensichtlich selbst nicht von ihrer Entscheidung überzeugt ist.1/3 Für Österreich ist ganz klar: Weder die #Atomkraft noch das Verbrennen von fossilem Erdgas haben in der #Taxonomie etwas verloren. Denn sie sind klima- und umweltschädlich und zerstören die Zukunft unserer Kinder.2/3 Wir werden den vorliegenden Entwurf genau prüfen und haben bereits ein Rechtsgutachten zu Atomkraft in der #Taxonomie in Auftrag gegeben. Sollten diese Pläne so umgesetzt werden, werden wir klagen. Denn #Atomkraft ist gefährlich und keine Lösung im Kampf gegen die #Klimakrise.3/3”*

*“” The @EU\_commission has yesterday in a night and fog action with its proposal for #taxonomy tried to greenwash #nuclear power & #gas. The timing of the publication alone shows that it is obviously not convinced of its decision itself.1/3 For Austria it is quite clear: Neither #nuclear power nor the burning of fossil natural gas have lost anything in the #taxonomy. Because they are harmful to the climate and the environment and destroy the future of our children.2/3 We will closely examine the present draft and have already commissioned a legal opinion on nuclear power in #taxonomy. If these plans are implemented as they are, we will sue. Because #nuclear power is dangerous and no solution in the fight against the #climate crisis.3/3”*

With the first threat of Austria suing the Commission based on the decision of including nuclear energy into the taxonomy, of all of the primary sources looked at, the subsequent coverage can be divided into the three main topics: greenwashing, nuclear power is dangerous and the timing of the delegated act was undemocratic. Gewessler states, “Ultimately am prepared

to file a lawsuit here- because the plans would not be legally compliant. It cannot be that the future of our children is sacrificed to the interests of the nuclear lobby” she goes on to say, “nuclear energy is extremely dangerous and certainly not a solution in the fight against the climate crisis. We will fight this clear greenwashing attempt by the nuclear lobby in Europe with all our might”(DerStandard, 2021).

It is also worth noting that apart from two articles, in the rest of the sources, Gewessler is the only one cited, no other members of the government are referenced. The day after the inclusion of nuclear energy in the Taxonomy (Feb. 2 2021) Gewessler and her ministry released an official press release. The title of the press release was as follows: *Nuclear energy makes no contribution to climate protection – Study confirms: nuclear power is not sustainable and does not help to achieve climate goals and social standards.* The statement goes on to explain that the Ministry of Gewessler (Klimschutz, Umwelt, Energie, Mobilität, Innovation and Technologie) commissioned a study to, “*ensure an objective assessment of nuclear energy in connection with the criteria of the Taxonomy.*” The conclusion of the study in the statement is that nuclear energy in cannot be defined as environmentally sustainable. The statement goes on to say, “*nuclear power makes no significant contribution to climate protection...Nuclear Energy does not meet the taxonomy requirement ‘Do No Significant Harm’ with regard to all the environmental goals specified in the EU taxonomy... Nuclear energy does not correspond to the international social standards that are assumed within the framework of the taxonomy*” (BMK, 2021). It makes sense that the main talking points come from the commissioned study and reinforce the point that the acceptance of nuclear energy in the EU Taxonomy goes against the core of what the Taxonomy is. Gewessler was quoted as saying, “*the decision to include nuclear energy and gas in the taxonomy regulation does not do justice to European efforts for a good and climate friendly future, there shouldn’t be a green washing program for investments in nuclear power and fossil gas*” (Kurier, 2022). Within the 28 page statement that the Austrian government sent to the Commission, Gewessler criticized the action by saying, “*with its supplementary delegated act on the taxonomy, the EU commission has quietly and secretly tried to greenwash nuclear power and fossil natural gas. In doing so, it is complying with the wishes of the nuclear and gas lobby*” (Gewessler Legt, 2021). In another article in De Standard by Thomas Meyer, the positioning of Gewessler is contrasted with that of EU Commissioner Mairead McGuinness who strongly supported the Taxonomy as a guidepost system. Gewessler on the other hand criticized that nuclear energy was outdated and too expensive, “*Wind and sun don’t send us an invoice, but a gas company does*”.

From the beginning it was quite clear that Austria was more alone in this fight that it would have liked to have been. While at the beginning it was able to count on the support of Denmark, Portugal, Spain and most importantly Germany, towards the end of 2021 Austria was feeling a little lonely. Despite the acting Environmental Minister Svenja Schulze (SPD) continuing to voice her opposition to nuclear energy, the voice was a bit drowned out once Angela Merkle essentially waived the white flag by stating that, she didn’t believe there was a way to prevent nuclear energy from being classified as a green energy in the EU taxonomy. It seems that this was already her general feeling in the previous EU summit where von der Leyen said that Nuclear Energy was a stable energy source. For those familiar with the political dynamics of the EU, this was interpreted as a clear sign of an agreement between Merkel and Macron who has been the ultimate endorser of nuclear energy in Brussels. What is interesting is that Austria continues to vigorously campaign

against nuclear energy where it seems like Germany had already accepted defeat and made it clear that it won't be pursuing legal action against the European Commission. This is the opposition to the expectation I had mentioned in the theoretical section where it seemed that in the political section, the strong reliance Austria has on Germany in regard to trade relations would push Austria to echo German sentiment. This is half true in the sense that Svenja Schulze (German Minister of the Environment) still was strongly against Nuclear Energy, but the seeming acceptance of Angela Merkle diminished the strength of Schulze's condemnation (Kaiser, 2021). However, Leonore Gewessler is a figure who should not be discounted as a factor in her own right. Before entering Parliament, Gewessler was at the head of Austria's largest environmental charity and lobbying group Global 2000. During her tenure there she also championed a popular campaign (Austrian's seemingly enjoy signing petitions) against the expansion of a nuclear power plant in neighboring Slovakia which was 100 km from the Austrian border. Global 2000 collected 260,000 signatures which was enough for them to persuade the chancellor to pressure Slovakian government into pausing its plans (Jones, 2020).

While former diplomat and Kreisky secretary, Thomas Nowotny wrote in an op-ed that Leonore Gewessler's anti-nuclear position exists for self-serving purposes of raising her domestic profile that hasn't stopped her from threatening to sue the European Commission. Nowotny also finds that Austria is proving itself to lack solidarity and to define itself as a troublemaker in the EU (Nowotny, 2021). Now, Austria finds itself facing off against the likes of France when it comes to nuclear energy. In February, a month after nuclear energy being included in the EU taxonomy Gewessler tweeted the press release of the ministry (see previous page). It is, however interesting to keep the two as the statements are directed towards different audiences and in the tweet the main point of contention is the 'do no significant harm' clause whereas in the press release multiple points are referenced (see above) ;

*“Die heute präsentierte Studie zur #Taxonomie-Verordnung zeigt uns das, was wir schon lange wissen: #Atomkraft ist nicht nachhaltig und darf auch nicht so bezeichnet werden. Denn sie erfüllt die wichtigste Voraussetzung "Do No Significant Harm" eindeutig nicht. (1/3) Die Studie schafft EU-weite wissenschaftlich fundierte Regeln und definiert, welche wirtschaftlichen Tätigkeiten als ökologisch nachhaltig zu bewerten sind und welche nicht. Das soll #Greenwashing verhindern und mehr Glaubwürdigkeit und Transparenz bringen. (2/3) Jedoch gehen die Meinungen der Mitgliedstaaten, ob #Kernenergie nachhaltig ist oder nicht, auseinander. Daher haben wir dahingehend eine Studie beauftragt, die eine objektive Beurteilung gewährleistet. (3/3)*

*“The #taxonomy regulation study presented today shows us what we've known for a long time: #nuclear power is not sustainable and should not be called so. Because it clearly does not meet the most important requirement of "Do No Significant Harm." (1/3)*

*The study creates EU-wide science-based rules and defines which economic activities are to be considered environmentally sustainable and which are not. This should prevent #greenwashing and bring more credibility and transparency. (2/3)*

*However, opinions differ among member states on whether #nuclear energy is sustainable or not. Therefore, we have commissioned a study in this regard to ensure an objective assessment. (3/3)”*

In regard to the role interest group involvement would play in Austria, I had speculated that I would see strong messages of condemnation and media references from NGO groups. This

seems to be the case. After the publication of the EU Taxonomy Greenpeace AT came out with multiple tweets condemning the action as well as physical protest action.

Strom aus fossilem Gas und Atomenergie ist NICHT "grün"! Trotzdem will die EU-Kommission diesen auf Druck von Lobbyisten und einzelnen Mitgliedstaaten in die #Taxonomie mit aufnehmen. Gas & Atomenergie als saubere Energieformen zu bezeichnen, ist ganz klares Greenwashing. [1/4] Eine Greenpeace Hochrechnung zeigt, dass mit dem aktuellen Vorschlag zum #Taxonomie-Rechtsakt bis zu 560,6 Mrd € in neue Kernkraftwerke und deren Nachrüstung fließen könnten. Es droht, dass dann Geld für bisher geplante Investitionen in Wind- und Solarenergie fehlen. [2/4] Gelder, die mit Hilfe einer grün gewaschenen #Taxonomie von EU-Mitgliedstaaten in die Kernkraft investiert werden, sollten eigentlich dazu dienen, EU-weit massiv in Solarenergie zu investieren, um den 1,5 °C Weg sicher, kosteneffizient & schnell zu beschreiten. [3/4] Die bis zu 560,6 Milliarden Euro Investitionen in Atomkraft könnten EU-weit zur Bereitstellung von 700 GW an zusätzlicher Sonnenenergie genutzt werden. Die Kommission muss ihre Atom-Träumerei sofort begraben und endlich Investitionen in echten Klimaschutz lenken! [4/4]

*Electricity from fossil gas and nuclear energy is NOT "green"! Nevertheless, the EU Commission wants to include it in the #taxonomy under pressure from lobbyists and individual member states. Calling gas & nuclear energy clean forms of energy is very clear greenwashing. [1/4] A Greenpeace projection shows that with the current #taxonomy bill proposal, up to €560.6 billion could flow into new nuclear power plants and their retrofits. There is a threat that money for previously planned investments in wind and solar energy will then be missing. [2/4] Money invested in nuclear power with the help of a green-washed #taxonomy of EU member states should actually be used to invest massively in solar energy across the EU to safely, cost-effectively & quickly follow the 1.5 °C path. [3/4] The up to €560.6 billion investment in nuclear could be used to provide 700 GW of additional solar power across the EU. The Commission must immediately bury its nuclear dreaming and finally direct investments into real climate protection! [4/4]*

There are multiple tweets from Greenpeace AT like the one posted on January 13<sup>th</sup> 2022. Using words like 'greenwashing' 'pressure from lobbyists' and 'threat' seems to illustrate the vigor with which not just Greenpeace AT but also other NGOs are opposed to the implementation of nuclear energy in the EU taxonomy. This is reinforced by an article published by Greenpeace AT in September of this year, "The EU commission has decided to provide investments in gas and nuclear energy with a green label. A breach of the law that Greenpeace will not accept...The proposal to label gas and nuclear power as green comes directly from the pen of the EU commission, which believes that investments in climate-damaging fossil gas and risky nuclear power plants will support positive ecological change. This was made possible by the EU taxonomy. The taxonomy was intended to provide private investors with a clear classification of sustainable financial products and thus steer the flow of money into sustainable, climate friendly sectors. But instead of supporting European climate goals as intended, it is degenerating into a greenwashing instrument for the gas and nuclear industries." (Bayona, 2022).

However, it's not just NGOs that are against nuclear energy, public opinion in Austria persists against nuclear energy despite the current geopolitical situation and the energy crisis Europe is facing as winter knocks on the door. In the parliamentary correspondence of May 4<sup>th</sup>,

the issue of the lawsuit is mentioned in reference to the energy crisis, *“Gewessler emphasized that the focus in the EU is about being unified. There must be a clear answer to Russia’s war of aggression and there must be solidarity with the people of Ukraine. At the same time, it is important to free oneself from dependence on Russian gas. This makes it all the more important to push ahead with the energy transition with all our might”* Gewessler referenced the lawsuit by saying, *“ a lawsuit against the EU taxonomy regulation is being prepared under high pressure”* when challenged on relevancy by her colleagues based on the fact that the lawsuit aims at nuclear energy, Gewessler responded by saying, *“the subject of gas is also being increasingly targeted”* (Parlament Österreich, 2022). This is an incredibly intelligent way to frame the discussion of the lawsuit on the taxonomy, by referencing energy independence and Russia she is implying that gas will also be targeted which implies that the lawsuit is not just anti-nuclear but also pro-democracy and could potentially be interpreted as an indirect sanction towards the Russian government for the Ukrainian crisis.

Politicians are not the sole decision makers; we cannot forget the role of constituents and public opinion. In April and May of 2021, the Eurobarometer was conducted, surveying Europeans attitudes towards science and technology. One of the questions asked was *“Welche Auswirkungen wird Atomkraft in den nächsten 20 Jahren haben?” “What will be the impact of nuclear power in the next 20 years?”* In Austria, of the people surveyed, 66% said the impact will be negative, 3% said there will be no impact and 30% said the impact will be positive. The Austrians had the second most negative opinion pertaining to nuclear energy after Germany with 69% of people surveyed believing that the impact will be negative (EU-Bevölkerung Bei Kernkraft, 2022). This opinion trend was reinforced by pollster Peter Hajek who conducted a representative survey of 800 Austrians asking the question, *“Soll Österreich angesichts der derzeitigen Energiesituation zukünftig ein eigenes Atomkraftwerk zur Stromproduktion in Betrieb nehmen?”* *“In view of the current energy situation, should Austria put its own nuclear power plant into operation for electricity production in the future?”* to this question an overwhelming majority of the respondents said no. Hajek goes on to say, *“rarely has the population been so united on an issue as on the issue of nuclear energy. Similar to neutrality this is part of the state doctrine of the second republic.”* It needs to be noted that in the survey the rejection of nuclear energy was through all voter groups in Austria (Der Standard, 2022). This rejection seems to support the important role of culture and path dependency in the cross national variation between Austria and Finland. Austria has stayed the course of being anti-nuclear energy and public opinion supports staying that way. This is also reinforced by what Hajek says about nuclear energy being as fundamental of an issue as neutrality for the second Austrian republic. An important nuance worth noting is that the question asked by Hajek was should Austria put its own nuclear power plant into operation, not should Austria sue the ECJ for the classification of the nuclear energy. Thus, while the public poll supports the argument that culture and path dependency play a role in how nuclear energy is viewed in Austria, it doesn’t necessarily help explain the intensity of the current opposition.

In conclusion, it seems that there is truth in what was said in the theoretical section, there is no such thing as monocausality and there is overlap amongst the arguments. Clearly, political parties do not explain the cross national variation as Austria with a conservative and historical governing party should be in favor of nuclear energy according to the literature. This is clearly not true. However, what can also be seen is that external factors are extremely catalyzing in regards

to Austrian politics, IbizaGate caused there to be a power vacuum and snap elections to be called which allowed the Austrian Green Party to find itself for the first time in a governing coalition. However, being in a governing coalition with a conservative party directly after a terrorist attack means that the Greens found themselves cogoverning on policy which was opposite to the beliefs of their voter base. Luckily, they had been able to secure a super portfolio which was broadly environmental, literally their name sake policy portfolio. The Greens granted the super portfolio not only to a woman with extensive NGO experience in Austria but also a clear predisposition against nuclear energy which would be interpreted to go beyond the traditional green party position. Thus, it seems that partisan dynamics is a factor which must be taken into consideration. For interest group involvement, it has been shown that Austrian NGOs reacted the way I would have expected issuing strongly worded statements and organizing themselves publicly as well. What in my opinion speaks volumes, however, about the impact and influence of interest groups, specifically NGOs in Austria is the fact that Leonore Gewessler went from being the head of Global 2000 to the Minister for Climate Change and Environmental Policy. This shows the influence and access that NGOs have to the political sphere in Austria. Culturally speaking, despite the current energy crisis that Europe is facing, opinion polls show that Austria as a country is still against Nuclear Energy. This works with my expectation when it comes to Austrian culture. I had expected Austria to continue down the path of being broadly anti-nuclear energy as due to path dependency, this was also reinforced by Hajek who said that anti-nuclear sentiment is as Austrian as neutrality and has been since the second republic. If anything, Austria proves that while cross-national variations may have many of the hallmarks in the literature, there is no discounting singular events nor people.

#### Finland:

In 2018, Finland proved to be an outlier in a way that it rarely is. The Finnish Green Party adopted a new stance on nuclear energy stating that they were open to all research and development on low carbon technologies which respected the environment. This included nuclear energy. The Finnish Green Party became the first Green Party in Europe to do so. This position was further entrenched this year as Vihreät De Gröna (the Finnish Green Party) voted by a large majority to adopt a pro-nuclear policy position, even though the party manifesto was altered. Now the manifesto states that nuclear energy is “sustainable energy” and even demands the approval process for small modular reactors (SMRs) to be streamlined (Finland's Green, 2022). In regard to the theoretical section, political parties as an explanation for cross-national variation becomes

impossible when the green party adopts nuclear energy into its manifesto which reinforces my belief that politics as a sole factor cannot explain the case between Austria and Finland. Due to Finland already having nuclear energy I hadn't expected the Finnish government to have much to say about nuclear energy besides of course evoking support on a European level. The Vihreät De Gröna adopting nuclear energy officially into their manifesto goes beyond a green party tolerating nuclear energy for the sake of a coalition. It marks a strong belief in nuclear energy and is a strong sign not only nationally but also internationally which I was not expecting to see. In Finland the Minister of the Environment and climate change is Maria Ohisalo, also chair of Vihreät De Gröna. This seems to make sense, a country in favor of nuclear energy being classified as a green energy, has an environmental minister who is in favor of nuclear energy and who also happens to be the chair of the green party who accepted nuclear energy into their manifesto. Maria Ohisalo tweeted her support of nuclear energy by saying:

Onko luonnon tilan parantaminen kestävämpiä? Vai kestävämpiä se, jos jatketaan kuten aina ennen? Luontoa on ajettu vuosikymmeniä ahtaalle niin Suomessa kuin koko EU:n alueella (ja toki muualla myös). Tässä ollaan, luonto köyhtyy, toimia tarvitaan. #luonnontilanparantaminen Toimivien reaktorien kannattaa antaa pyöriä loppuun asti, jos/kun viranomaiset varmistavat turvallisuuden. Ydinvoima on yksi osa puhtaan energian palettia ja sitä tarvitaan ilmastonmuutoksen torjumiseksi uusiutuvien lisäksi.

Is improving the state of nature unsustainable? Or is it unsustainable to continue as before? Nature has been squeezed for decades, both in Finland and across the EU (and elsewhere, of course). Here we are, nature is becoming poorer, action is needed. #improving the state of nature. It's worth letting working reactors run. Nuclear power is one part of the clean energy puzzle and is needed to fight climate change alongside renewables.

Beyond nuclear energy, Maria Ohisalo tweeted her support of the taxonomy also in regard to the forestry industry (11/17/2021). For the Finnish government, the Taxonomy supports and protects two vital industries, nuclear and forestry:

EU:n yhteinen taksonomia kestävä rahoituksen luokittelusta on yksi keskeinen keino ilmastokriisin torjumiseksi. Taksonomian kriteeristön avulla ilmastoystävälliset hankkeet voidaan helpommin tunnistaa rahoitusmarkkinoilla. 2/6

Näin on mahdollista vauhdittaa vihreää siirtymää, kun myös yksityinen raha ohjautuisi tehokkaammin siihen. Myös Pariisin sopimus velvoittaa meitä suuntaamaan rahavirrat ilmastotavoitteiden mukaisesti kestäviin kohteisiin 3/6

Taksonomiasäädöksessä on mukana myös kriteerit ilmastoystävälle metsätaloudelle. Se ei ole tärkeää ainoastaan ilmastonmuutoksen torjunnan vaan myös luontokadon kannalta. 4/6

Näillä kriteereillä luodaan kaikista vastuullisimmille tuotteille ja toimijoille markkinoita, mistä on nimenomaan hyötyä kestäväan metsien hoitoon sitoutuneille toimijoille. Se ei tarkoittaisi sitä, että kaikki muu elinkeinotoiminta muuttuisi kannattamattomaksi. 5/6

The EU's common taxonomy for classifying sustainable finance is one of the key ways to tackle the climate crisis. The taxonomy's criteria will make it easier to identify climate-friendly projects in the financial markets. 2/6

This will help to accelerate the green transition by also channeling private money more efficiently. The Paris Agreement also obliges us to direct financial flows towards climate-resilient projects 3/6

The taxonomy regulation also includes criteria for climate-resilient forestry. This is important not only for combating climate change but also for nature loss. 4/6

These criteria will create a market for the most responsible products and operators, which will be of particular benefit to operators committed to sustainable forest management. It would not mean that all other economic activities would become unprofitable. 5/6

This sentiment of her previous tweets was echoed by Ohisalos colleague from the SPD Eero Heinäluoma, *“my position is clear. Emissions reductions according to the Paris Climate Agreement cannot be achieved without the use of nuclear energy as an intermediate form of energy”* (Naschert, 2022). Due to the strong and explicit support of nuclear energy received from the Greens and the existing support nuclear energy has consistently enjoyed from the SPD (the party aims for Finland to become oil independent by 2030), the explanation of coalition politics is not applicable either as both the Greens and the SPD are in favor.

Since the energy crisis prompted by Putin invading Ukraine, the question of energy autonomy has been on the minds of countries and constituents. The question becomes particularly relevant when like Finland you share a 1340 km long border with the invading country. However, beyond geopolitical implications, it also raises direct questions like how Finland will heat itself this winter? A winter that is colder than in most areas of Europe. However, for Finland it's not just bad news. Forest.Fi, one of the main forest industry lobbies, recently published an article called, *“impact of inflation on forest sector- experts say electricity price is bringing an unexpected advantage to Finland”*. The article goes on to explain that while the forestry industry consumes a significant amount of electricity, its production processes create electricity and heat as well, only part of which is required by the forestry companies themselves. The leftover energy is then sold by the companies to the national grid and local heat networks. The article also explains that what is useful is that forest industry groups such as UPM, Stora Enso, and Metsä Group also own directly or indirectly shares in nuclear power plants. Thus, *“At current electricity prices and during the peak prices that are expected, these are significant competitive advantages”* said Marjo Maidell. Maidell also makes the point that it is likely that mills in central Europe will be forced to shut down before the end of the year as increased costs might make operation unprofitable and energy might be unavailable (forest.fi, 2022). Since the classification of nuclear energy as a green energy there have been multiple articles which have come out on forestry sector websites which aim to explain that due to the energy mix (specifically nuclear energy) of Finland the forestry sector will fare better than its other European counterparts through this energy crisis. What this also means is that when the largest employer is doing better than in other countries, more jobs are safe which means that labor unions will not challenge the governing party. In my theoretical chapter, for the factor of interest group dynamics I imagined that there wouldn't be any sort of direct reference of the relationship between the forestry industry and the government, I expected there to be more indirect evidence. The article mentioned above clearly references many of the points which are vital for exercising power whether it be in an industry or in a government. The fact that the major forest industry groups are also shareholders either directly or indirectly in Finnish nuclear power plants does say quite a bit about the power of the forestry industry. They are literally at the shareholder table with the government on a regular basis, that this allows for increased access and consideration is only natural. Being the largest employer in Finland also means that when Trade Unions urge the MEPs not to oppose the classification of nuclear energy as green, the Finnish government listens. 20 unions representing Belgian, Bulgarian, Czech, Finnish, French, Hungarian, Lithuanian, Romanian, Slovakian, and Slovenian energy workers said the inclusion of nuclear in the EU taxonomy is vital for tackling climate change and increasing energy independence. The joint statement is as follows:

*“For the employees of the electricity and gas industries represented by the European trade unions who signed this letter, the inclusion of nuclear and gas in the European taxonomy is of*



*primary importance for the climate challenge, for diversifying energy supplies and increasing European energy independence, for social justice, for economic sustainability and for the future of their jobs in an essential industrial and service sector. Also, the war in Ukraine is a wake-up call for Europe to diversify its energy resources and reinforce its energy autonomy” (WNN, 2022).*

Thus, I do believe that interest group dynamics play a role in the cross national variation between Austria and Finland. Finland’s largest and most powerful interest group which also happens to be Finland’s largest employer, owns shares directly and indirectly in the nuclear energy which the Finnish government is supporting not just nationally but also to be classified as a green energy in the EU taxonomy. In Finland, nuclear energy has been around since the 1950s, to the Finnish people it’s certainly not a new or foreign concept and not something to be scared of. In the cultural section of the theoretical chapter there is discussion of how much of public opinion is shaped by risk avoidance and the geographical distance between the people and the nuclear power reactors.

Path dependency shows us that for both factors there is less, there is lower risk avoidance as Finnish people understand their energy is generated in part by nuclear energy and their energy allows them to move around, to heat their homes, to communicate with their loved ones, etc, beyond that the Finnish nuclear reactors have proven themselves to the people. Last year, Loviisa plant broke a reliability record working at full capacity 93% of the time (Fortum, 2022). These sorts of things also prove to the Finnish people that nuclear energy is getting better, it is improving and becoming more reliable. In regards to physical distance from nuclear reactors, some might see them on their way to work, some might work at them, and some might never see them at all, however the awareness that they are present permeates. In the most recent Kantar poll conducted on Finnish citizens this year, 60% of respondents said they have a “fully positive” or “mostly positive” view of nuclear energy (TVO, 2022). This was also reinforced with the Eurobarometer survey where Finland had one of the lowest scores when it came to the question *What impact will nuclear energy have in the next 20 years?* 60% responded by saying a positive impact, 4% responded by saying neutral impact, and 35% responded by saying a negative impact. These results are almost exactly opposite of the response the Austrians gave when asked the same question (Special Eurobarometer 324, 2022).

Another valid indicator of public opinion based on that no party in parliament in Finland is of the opinion that nuclear energy should cease to be a part of the energy mix. Even the Finnish branch of Greenpeace has stated that they are willing to accept SMRs as well as the nuclear waste storage strategy. Sini Harkki, programme director at Greenpeace Nordic was quoted as saying it would be “difficult to reach net zero without nuclear energy” (TÖRMÄNEN & VISSCHER, 2022). Perhaps even more surprising is that the Finnish chapter of Fridays for Future has come out in support of nuclear energy in opposition to the opinion of Greta Thunberg by stating, “*Now is not the time to rule out one low-emission energy source altogether; rather, we need to use all means available to fit the climate crisis. Opposition to nuclear power will complicate and increase the already enormous task. If we want to stop global warming below 1.5 degrees, we need every possible means, including nuclear power, to achieve that goal.*” The chapter went on to support the classification of nuclear energy in the EU taxonomy (Fridays for Future Finland, 2021). Something which struck me from the beginning of Finnish public opinion is the overwhelming sense of pragmatism. There is full acceptance of the path dependency to which they are bound to due to the fact that they have nuclear energy and that it is a viable way to potentially become

carbon neutral, and that the goal of carbon neutrality and overall environmentalism take priority over what one could consider politics or interest groups or culture. In the theoretical section of culture, I had stated that I would expect Finland to continue further down the path of nuclear energy due to path dependency. This has been proven true, what has perhaps been surprising is the different groups who have all expressed their support for nuclear energy who normally wouldn't – Greenpeace, Fridays for Future, The Green Party, etc. The reasoning for all of the groups may be traced back to pragmatism as already mentioned. The Finnish people and government seem to agree on the utility and need to exploit nuclear energy to pragmatically fight climate change and stay below 1.5 degrees.

In conclusion, for Finland, the explanation of political dynamics to explain cross-national variation is void. When both the Socialist Party and the Green Party are pro-nuclear energy, variation cannot be explained through political parties nor through coalition dynamics. However, what was nonetheless surprising was the fact that the Green Party went so far as to incorporate nuclear energy into their manifesto. For interest group dynamics, I had expected the Forestry industry to be in the periphery of the conversation, I was expecting indirect references. What I had not expected was for the forestry industry to be so explicit in how they framed their argumentation for the necessity of nuclear power (the competitive advantage it gave to companies, the labor unions who petitioned the MEPs for nuclear energy to be included in the taxonomy) but most of all I was not expecting official forestry lobby articles to so clearly discuss their involvement in nuclear energy and to explicitly say they had a vested interest/benefit due to being shareholders (directly or indirectly). Culturally speaking, I had expected Finland to continue down the path of being pro-nuclear energy and maintaining that position. That is also what I found to be true. Finland enjoys high trust from its constituents when it comes to nuclear energy. It helps that it is not only very reliable, but also that nuclear power has been accepted by surprising supporters as the most efficient way to combat climate change. By having nuclear energy, the Finnish people have lived from and potentially with nuclear energy for the last five decades, that has led them down the path of cultural acceptance, this is nicely reinforced when looking at the fact that no party in parliament wishes to shut down nuclear power plants. All parties see the interest in using the available resources to come up with the most effective energy mix which allows for the 1.5 degrees to be maintained. The fact that both Greenpeace and Fridays for Future Finland are in support of nuclear energy shows to what an extent there seems to be a consensus that nuclear energy is a useful solution to an urgent problem. What all sections seem to show is the messiness and the amount of overlap in the Finnish case regarding nuclear energy. All factors seem to touch (political parties, NGOs, labor unions, forestry industry, nuclear energy, etc), it seems very hard to separate them from one another. The only one which truly stands apart is the case of political dynamics where neither political parties nor coalition dynamics or as possible explanations, even when coupled with other factors don't explain the occurrence of both the Finnish SPD and the Greens explicitly supporting nuclear energy the way they do. If one thing has been made clear it is the fact that for the above listed reasons Finland only had one choice when it came to the classification of nuclear energy as a green energy in the EU taxonomy and that was to support it, fully.

## Conclusion:

To come back to the beginning of my thesis, the question I wanted to attempt to answer was, “What factors have caused Austria to be anti-nuclear energy in the EU Taxonomy while Finland is pro-nuclear energy in the EU Taxonomy?” While the research question may seem clumsy in its explicitness, what I was really aiming to understand were the factors which contributed to the cross-national variation between Austria and Finland when it came to the classification of nuclear energy as a green energy in the EU Taxonomy. This question proved to be more complex than I had anticipated as it is multi-level and interdependent. At first glance it seems, one country (Finland) is in favor of the classification because it has nuclear energy and the other country (Austria) is against nuclear energy because it doesn’t. However, according to the existing literature, conservative governments are meant to support nuclear energy while left leaning governments are supposed to oppose nuclear energy. Had Austria and Finland fit into the existing literature the way they were “supposed” to, my thesis would have ended there. However, Finland and Austria do not fit into the existing literature the way it would be expected. Austria has been governed by a conservative central government essentially since the creation of the second republic and Finland has been governed by the social democrats for the last 50 years. Thus, within the existing literature there is a gap, which leaves the question of Austria vs. Finland unanswered. The goal of my thesis was to look at this gap and determine which factors could potentially help to explain the cross-national variation between the two countries. There is real value in attempting to answer this knowledge gap especially with consideration toward Europe’s current geo-political landscape. The energy crisis of this winter has shown the instability we face and our dependence on our not-always-friendly neighbors. Furthermore, as this thesis is being finished, heads of government are coming back from the COP 27 in Sharm El Sheikh with renewed vigor to face environmental problems, as they are now more than ever also tied to geo-political ones. Understanding the factors that explain cross-national variation is vital to help mitigate political opposition, as Europe will need to band together to solve the current energy crisis and maintain its engagements from the Paris Climate Agreement.

From the literature there seemed to be three main umbrella factors under which most drivers could fall: interest group dynamics, cultural factors and political dynamics. Political dynamics in the purest sense (which party is in power) is not applicable as it is the core question I examined in my thesis, why do Austria and Finland have the positions they do regarding nuclear energy? The existing literature says that according to political dynamics in the purest sense, it should be the other way around. At the beginning of my thesis, I am explicit about the fact that I do not believe that there is such a thing as monocausality, especially in a topic as complex as energy policy and as emotionally charged as nuclear energy. I also state that I anticipate there to be a certain amount of overlap among the factors. Through my thesis I have found both statements to be true: Monocausality does not exist and overlap is very much real.

For Finland, there seem to be three overarching factors that contribute not only to the continued use of nuclear energy in the country, but also its support of nuclear energy being classified as green on an EU level. First, interest group dynamics cannot be discounted. In Finland, the largest industry is the forest industry. Being the largest industry, it is also the largest employer in the country. Finland has always worked very closely with industry and labor unions. As the forestry industry is a sector which is costly and energy intensive, the need for cheap and reliable energy has been a key concern for the tripartite system. Industry needs energy, energy

powers industry which powers jobs, jobs allow for salaries, which power the economy which leads to constituents who enjoy upward mobility which makes them happy, which makes them want to reelect incumbent governments. The tripartite system also made it clear to the Finnish government that Finland was in many ways a stool — take away one leg, be it labor unions or industry, and the stool would fall over. The forestry industry as already mentioned is an energy intensive industry. This is also why the main forestry industry players are also shareholders (directly or indirectly) in nuclear power plants, making them a powerful player in not just one industry, but two. Second, the culture of Finland is open to nuclear energy due to different factors. The country has a complex relationship with its neighbor to the East, Russia, which has taught them to prioritize energy autonomy perhaps more than other countries have. Finland's nuclear energy path dependency has served well in regard to public opinion of nuclear energy in Finland. More than 60% of the Finnish population support nuclear energy and nuclear power is so widely supported that no political party represented in the Finnish Parliament is against nuclear energy. Among the Finns there seems to be a pervasive sense of pragmatism and the understanding that nuclear energy is a useful tool in the fight against climate change. The final reason is political. Beyond the broad political support for nuclear energy, the Finnish Green party recently took a historic step to accept nuclear energy as an environmentally responsible option in their manifesto. Thus, not even coalition politics explain the cross-national variation. However, it might explain the vigor with which Finland is able to support nuclear energy on a European level. Since nuclear energy is a universally accepted source of energy by all political parties there is no need to politick on an EU level for national politics as there is full consensus.

For Austria, the question regarding its opposition was two-fold: what were the factors and what could explain the intensity of the opposition. Taking the matter of classification of nuclear energy in the EU taxonomy to the European Court of Justice is an incredibly powerful act. This act illustrates violent opposition to the classification. This doesn't make sense as according to the literature, two most important factors to explain opposition to the classification of nuclear energy as green energy in the EU taxonomy are *coalition politics* in conjunction with *outlier events* and *cultural factors*. Austria has been on a non-nuclear path since the referendum in 1978 when Austrians voted against the nuclear reactor, which had already been built. Path dependency in this case cannot be discounted as a factor, as the referendum was a clear signal to Austrian politicians that the electorate was not in favor of nuclear energy. Thus, they continued to invest in other energy alternatives such as hydro-energy, thanks to the investment Austria received through the Marshall plan power WWII. The second factor, which is vital in understanding and potentially explaining the variation, is coalition politics. With the snap elections in 2019 provoked by IbizaGate, the Austrian Green party found itself for the first time in a governing coalition. However, it must be noted that this coalition was built on cohabitation rather than sharing a common vision. The division of portfolios gave the Greens the super portfolio of broadly environmental (climate, energy, infrastructure). Beyond being their name-sake portfolio, it would become the portfolio that would require a lot of political power. With a terrorist attack in Vienna provoking conservative legislation, the Green Party found itself not being able to impact policy to the extent it would have liked. However, the party still had the environmental portfolio, which was being led by Leonore Gewessler, who before entering parliament was at the head of Austria's largest environmental charity and lobby group. That lobby group initiated a strong collective action against the expansion of a nuclear power plant in Slovakia leading the Chancellor at the time to

put pressure on the Slovakian government to pause the plan. While interest group dynamics are not a factor I listed to explain the cross-national variation, the fact that the former head of the largest environmental NGO was appointed to the position of the Minister of the Environment speaks volumes, in my opinion, about the access NGOs have to government in Austria, and helps to explain the vigor of the opposition. The Greens were given their name-sake portfolio, but were politically blocked in other policy sectors due not only to the terrorist attack in Vienna putting national security on the front burner, but also the COVID pandemic. This left the Greens with one true policy area with which they were able to make an impact. Beyond that, the Minister is a young politician who has held previous positions in which her vigorous opposition to nuclear energy served her well. While in Finland the vigor of support can be explained through political consensus, thus the lack of party politicking on a European level, the opposite might be said about the Austrian Green party, in particular Leonore Gewessler.

To conclude, one can see that not all factors are equally applicable for each case and that there is overlap among factors. This is also what reinforces the complexity of the answer to my research question. What is clear is that energy policy is complex and that generalizations are difficult to make. While the factors discussed in the previous sections are vital to explaining the cross-national variation between Austria and Finland, I also believe in the importance of outlier factors. In Finland, the current geo-political situation with Russia was unexpected and has reinforced the urgency of energy autonomy. Seeing as all parties are in favor of nuclear energy, they are able to speak loudly and strongly with one voice. As already mentioned in the above chapter, I believe that in Austria the vigor of the opposition can be explained through the one off effects of a national tragedy and the power of a Minister of Environment with a deep anti-nuclear predisposition. Whether or not Austria will be successful in convincing the ECJ that nuclear energy does not belong in the EU Green Taxonomy remains to be seen. What is clear, however, is that debate is far from settled.

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