

# Coal-land, the way forward for Poland?

A within-case research on the national interests influencing the Polish implementation of the EU Renewable Energy Directive



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# Abstract

The study aims to understand and map the influential factors affecting the degree of implementation of the EU Renewable Energy Directive, RED, in Poland. RED sets individual goals for all member states of the total share of renewable energy sources, RES, in each nation's energy mix by the year 2020, a goal Poland is anticipated to fail to reach. The study is a within-case study conducted through a process-tracing using hypotheses to investigate the relation between Poland passing the directive into national law up until failing the goals set to 2020. The theoretical framework of Liberal Intergovernmentalism is used stating that all actors operate in accordance to what maximise their interests. The constellation of domestic interests in Poland is assumed to be based on economic, societal and public health factors, which influence the governmental position. The degree of implementation is evaluated through the concept of legalisation.

The main hypothesis concludes that a low level of ambition from the Polish government, influenced by the constellation of domestic interests, to follow the RED has resulted in a low degree of implementation. With the particular emphasis on the importance of the historic and present dependency on coal in Poland.

*Key words:* Process-tracing, renewable energy, Poland, national interests, EU RED  
Words: 10 000

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# 1 Introduction

Climate change has been acknowledged as a severe threat to the whole world. As a result, the European Union has developed the Climate & Energy package with legislative goals for all member states in order to reduce global warming. The package entails a long-term strategy to achieve complete climate neutrality by 2050 with a sub-goal set to 2020 entitled to raise the total percentages of renewable energy sources, RES, in the EU. The Renewable Energy Directive (RED 2009/28/EC) sets national targets of the total percentage of RES for each member state. Director of the Department for Renewable Energies in Poland, Piotr Czopek states that “*Poland’s energy transformation is one of the most - if not the most - ambitious programs of such kind in the EU.*” (Piotr Czopek 2020)<sup>1</sup>, a statement I find interesting as Poland simultaneously is called the least climate ambitious country in the European Union (CAN 2018).

Poland, as a member of the EU, is tied to the legislative directive and obliged to reach a percentage of 15% of RES in their total energy production by 2020. The year is now here, and all member states should within a few months have reached the first sub-goals. As of right now, Poland is not anticipated to succeed and reach its goals. Instead, various legislative regulations complicating the development of production of RES has been implemented, and the production of coal has been increased by the instalment of the first new coal power-plants in 25 years. The accepting of the EU RED and the actual implementation of it on a national level, therefore, show contradictions in a puzzling way. This study aims to investigate the factors behind this failure.

This research builds on the assumption that all nations act in accordance with the constellation of the domestic interests, presented by the theory of liberal intergovernmentalism, LI, and that these interests further affect the degree of implementation of national legislation. Hypotheses are developed to identify the causal mechanisms and enable an investigation. This is then conducted through a process-tracing in order to define the connection of the main factors influencing the Polish energy policy.

Empirical evidence will be collected according to three influential factors assumed to influence the energy policies in Poland, economic, social and public health factors, in order to assume the governmental position further to investigate the degree of implementation of the EU RED. The evidence is later followed up with an analytic discussion where the hypotheses are tested. The study concludes with a discussion and answering of the research question

<sup>1</sup> Piotr Czopek, Director of the Polish Department for Renewable Energy, e-mail 12 may 2020

## 1.1 Research purpose and question

The purpose of this study is to understand why Poland does not reach the binding goal by 2020 set collectively by the EU. The theoretical framework, LI, is further aimed to be tested by examining hypotheses connected to important factors, this enables the presentation of an overarching picture of the circumstances behind the Polish energy policies. The purpose is not to evaluate the policy process on a detailed basis, but to paint the overall picture of what factors interplay as essential mechanisms when ambitious climate goals are taken and implemented in an EU member country. Through a conduction of a process-tracing on a within-case limited to the Polish energy policies, this paper will examine how influential factors have interplayed and influenced the national interests and thus by extension the degree of implementation of the EU RED in Poland. The research question aimed to be answered is as follows:

*What factors have influenced the Polish failure to reach the EU Renewable Energy Goals by 2020?*

## 1.2 Background

The first step for the EU to work towards the Climate & Energy package was to agree on legislative goals for all member states, the 20-20-20 by 2020 targets (European Council 2009). The proposal was accepted by all then 27 member countries and the first step of the Climate & Energy package for 2050 was thus in motion (Ancygier 2013, p. 22). This has later been given higher priority as the Paris Agreement was signed in 2015 which has increased the focus of the Union to fight climate change and succeed to stabilise global warming on a rise of 2°C (European Commission 2018).

Directive 2009/28/EC, here on referred to as RED, is seen as the policy solution for several issues. Mainly as a measure to beat global warming, as mentioned above, but also to ensure energy dependence in the region, by investing in long-term solutions and enable economic growth (European Commission, 2018a). RED includes individually calculated national targets for each member state. A share calculated from the Gross Domestic Product to fit the member state and to make sure that the total cut in emissions will be reached to meet the goal by 2020 (RED 2009/28/EC). The directive is only binding in regards to the specific targets; hence it is up for each national government to choose the method of implementation, following the Treaty on the Functioning of the European Union art. 249 (Article 249 TEC). A revised version of the RED was passed in 2018 as

RED II and defines goals for the year 2030. The content is in large the same with some reformulations (European Commission 2018).

Poland threatened to veto the whole project before the negotiations state was finished 2008, as they demanded more financial ‘solidarity’ and respect as they suggested that enough caution was not taken by the EU to match the goals for all economies. However, RED was adopted unanimously after negotiations heeded opinions, from specifically the Central Eastern Europe Countries, CEECs with Poland at the frontline, with a package of instruments that provided side payments as compensation to lower-income member states (Skjærseth 2014, p. 517-519). Even so, Poland continued to oppose the directive arguing for it being too ambitious until it passed in the European Commission and thus also in Poland (RED 2009/28/EC).

The reason is mainly based on Polish coal dependency as around 80% of the energy still comes from coal, the highest percentage in the EU. The usage of fossil fuel has resulted in high levels of polluted air, with the highest annual level in the EU, which is a big issue for both the Polish people in especially affected cities and for the environment (IEA 2020; OECD 2016). Even though the percentage of RES has increased in the last decades it is not enough to reach the goals as they are estimated to only succeed with 11,3% of 15%. A number not likely to change significantly until 2020, making Poland miss the set target by 3,7% which is the fifth worst result in the EU (Eurostat 2020a).

### 1.3 Previous research

Integration between the European Union and the member countries have been researched from different perspectives and theories since the Union was created. As well as the policy processes, from domestic interests, negotiations in the EU organs, into the implementation of specific directives in each national government.

The particular position of Polish energy interests has been well documented. The Norwegian professor in political science, Jon Birger Skjærseth examines negative national implementation experiences as a correlation between negative or positive policy feedback towards the EU Climate and Energy package and requirements to implement these. Skjærseth discusses the importance of a similar *status quo* between EU and member countries in terms of where adverse correlation results in a low degree of implementation of the commonly passed directive, described as the ‘goodness-of-fit’ approach (2014, 2018). I found this notion interesting in the case of Poland as their resentment to the RED in the EU might be mirrored nationally.

Dr Andrzej Ancygier, a senior climate policy analyst with a particular focus on European energy policies, has studied the effect of Europeanization on Polish energy policies through a top-down approach. His work “*Misfit of Interests instead of the “Goodness of Fit”? Implementation of European Directives 2001/77/EC and*

*2009/28/EC in Poland*”, investigates how the Polish energy policy changed as the implementation of the directives transpired (2013, p. 21). The study has generated helpful mapping of the Polish energy sector in addition to a concluded picture of the political system which has been of great guidance for my study.

The theoretical assumptions used in this thesis is further based on the approach of rational choice. An approach which explains economic and political behaviour. Milton Friedman has expressed the importance of empirical evidence in order to connect an outcome to the rational interests (1953).

### 1.3.1 Contribution

Poland has, as presented above, been the subject for research before. This study builds on earlier research on the subject, mainly, the book mentioned above by Ancygier. The book is used as a framework as this study can be seen as a follow up on how Poland has succeeded to reach the goals presented in the said directive, which follows the suggestions for further research presented by Ancygier (2013, p. 60). The scientific relevance is thus high. This study is also of importance in more general terms as the 20-20-20 by 2020 deadline soon is reached. This study contributes with information and understanding of how Poland may act concerning other sub-goals, and ultimately, the primary goals set for 2050. How one member country acts has a significant impact on how ambitious future climate goals develop, which will affect the EU as a whole and in extension, the whole world as climate change is a global threat.

## 2 Theoretical Framework

In this section, I am introducing the theoretical framework for the research, which is a general approach based on the idea that all actors act rationally following their interests. This is presented by Liberal Intergovernmentalism. The theoretical outline is essential for a study conducted through process-tracing as it sets the general outline of what is relevant to search for when examining causal connections (Teorell – Svensson 2007, s. 43-47). Moreover, this follows with a presentation of the main hypothesis connected to the research question and the partial hypotheses developed to enable the process-tracing, linked with the assumed influential factors.

### 2.1 Liberal Intergovernmentalism

Liberal Intergovernmentalism, LI is a theoretical approach developed primarily to study European integration in order to understand the complex system between the supranational organisation and the member countries. As this study aims to investigate the national and domestic actions after the adoption of an EU directive, it is only the national aspect of the theory that is used and presented further.

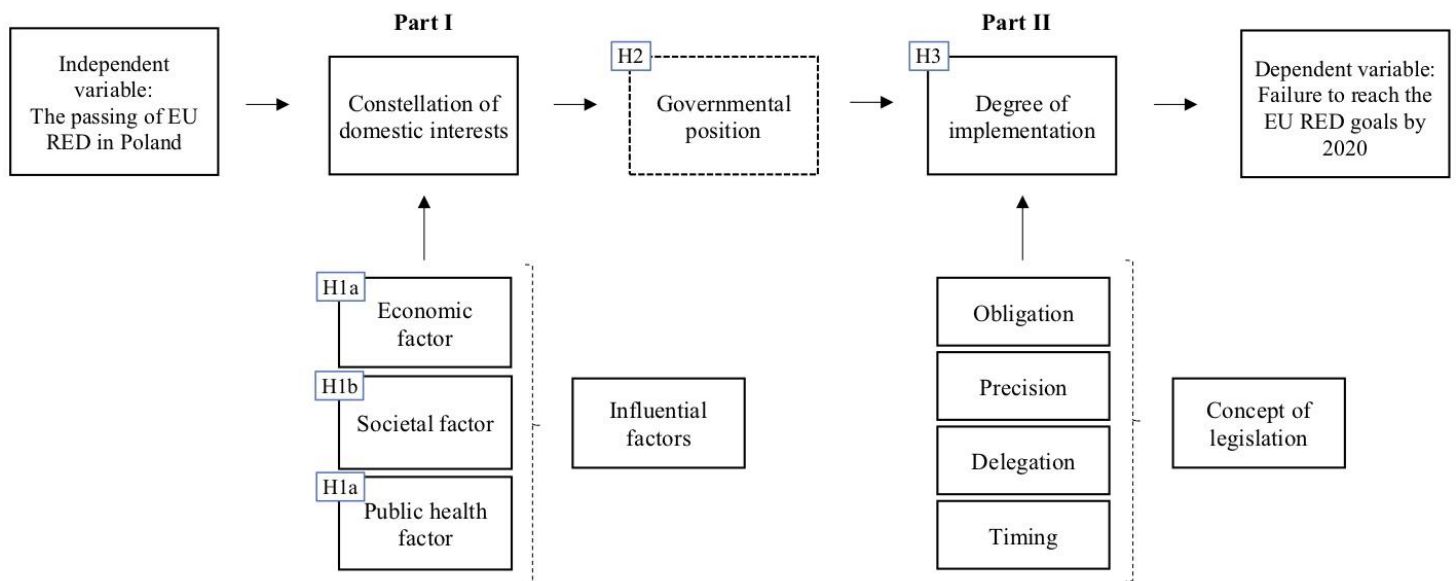
Andrew Moravcsik and Frank Schimmelfennig present the base of Liberal Intergovernmentalism as built on two general assumptions. The first being that states have a wide range of domestic voices and wills domestically which, internationally, is treated as an entity. As this study investigates the domestic level it is, therefore, the parts that create the national entity that is of interest. These interests are investigated with the assumption that all actors are interest-driven (Moravcsik 1997, p. 518). Further, states are also seen as the ‘master of the treaty’, meaning that they act as critical actors in accordance to their interests and thus will transfer directives to domestic policy accordingly (Moravcsik - Schimmelfennig, 2009, p. 2-5). The second assumption of LI is that all states act rationally in accordance with their interest. States will, as rational actors, assess the situation and choose the option of which maximises the outcome following their interests. Moravcsik means that the agreement to cooperate in international institutions comes from strategic and rational choices as results from intergovernmental negotiations (Ibid., p. 3). In this study, I have transformed this assumption onto the domestic level, meaning that actors will try to influence the outcome in order to maximise their interests.



## 2.2 Hypotheses

To execute a process-tracing, the establishing of plausible, explanatory hypotheses, is of importance, as well as the categorisation of mechanisms. The purpose of the usage of hypotheses is to enable the connection between the theoretical framework and the empirical evidence and therefore facilitate the possibility to answer the research question. Moreover, the purpose of the hypotheses is to establish whether the mechanisms investigated are the reasons behind the causal connection between the presented variables (Beach 2017, p. 2). To enable an answer to the main hypothesis, and thus the research question, it is further divided into the total of five hypothesis. The main hypothesis to be examined, is based on the research question and the theoretical framework, presented above and is:

*Main hypothesis: The constellation of domestic interests considerably shapes the translation of EU Renewable Energy Directive into national law and has thus influenced the failure to reach the goals set to the year 2020.*



**Figure 1.** Presenting the independent and dependent variables and the assumed causal links between part I and II as well as the connection between hypotheses.

In order to investigate this, the process is divided into two parts (*see figure 1*). Part I is based on the influence of the constellation of domestic interests and part II, the degree of implementation, transformed into national law by the government. Below, the mechanisms of part one and two are presented through hypotheses and theoretical connection, based on the assumptions described by Liberal Intergovernmentalism; that states and actors within the state act with a rationalistic behaviour that is interest maximising.

## 2.3 Part I - The Constellation of Domestic Interests

Firstly, a definition of the term interests is of importance as it builds the framework for the research. A country does not have only a number of fixed interests and preferences laid out, as stated by LI. Numerous actors on different levels govern what the national interests are. August Pradetto, has defined interest “*as a correlation between an individual or collective actor and a material or non-material object he values*” (Pradetto 2002, p. 8-9). I interpret the object of value as being the outcome that generates the most value to an investigated actor. In this case, the most favourable approach to energy policies. Ancygier further points out two factors determining the preferences of an actor, or the interests of a nation, being “*the availability of options that an actor can choose from and its interests that determine which of those options is the most preferred by an actor*” (Ancygier, 2013, p. 58). I will come back to how this is interpreted in my study further down as the established influential factors are presented.

The theoretical ideas presented above are further connected to the definition of interests through the ‘goodness-of-fit’ approach, which examines the correlation between the interests of the EU and the national interests of the member state. All member states in intergovernmental systems, like the EU, must compromise in different aspects. The ‘goodness-of-fit’ line builds on the idea that countries will resist implementing policies which do not fit the national status quo (interest) and thus require changes in the same (Skjærseth 2014, s. 500). As this study does not aim to investigate the direct relation of the EU and Poland, only the autonomy of single actors is applied in the research. The ‘goodness-of-fit’ says that single actors can successfully push for interests despite misfit of the status quo based on their preferences (Duina, 2007, p. 339). The approach thus takes into account how national traditions, political system and national regulatory patterns influence the general national interests (Keading – Mastenbroek 2006, p. 332-224). On this basis, I have assumed what interests have influenced the Polish government when implementing the EU RED, presented as factors below.

### 2.3.1 Influential factors

I have targeted three factors which are assumed as the base of the forming of interests influencing the national energy policies in Poland, determined after expert-interviews where these factors were highlighted (Ancygier 2020<sup>2</sup>; Skjærseth 2020<sup>3</sup>). They are developed in order to enable mapping of the domestic interests within various policy areas in Poland following the assumptions presented above. These factors are presented as entities which entail actors and actions which all behave in accordance with the theoretical framework. I assume some actors are more influential than others in shaping the general national interests.

Further, I reserve myself in the positioning of the factors by stating that all political areas are intertwined in a democracy. The purpose of the influential factors presented below is thus to highlight areas where the causal mechanism are probable. The factors are presented with related assumptions that spawn individual partial hypotheses which leads to the third hypothesis, concluding part I.

#### **Economical factor**

The national economic interests are today of the highest importance in all nations in the globalised world as a thriving society is built on economic growth and development. A standard measurement of the economy of a nation is the gross domestic product, GDP; it corresponds to the total value of the goods and services produced in a country over a given period. GDP is used to indicate how prosperous the economy of a country is (IMF 2020). The share of energy calculated in the GDP of a nation is measured as energy intensity, EI, and shows how efficiently a country is using its energy supply. A low EI is more profitable than a high EI; the measurement is calculated as units of energy per unit of GDP. Energy's large share of the economy of a nation makes energy policies a highly economical matter. The link between economic growth and energy is thus based on the energy demand and the capacity a country has to provide it (Sharma et al. 2019). Energy dependency refers to the proportion of energy necessary to import for the economy and further indicates the political importance of the energy market (Eurostat 2020b). All of these factors influence the energy mix, another important indicator.

When connected to the theoretical framework is the ensuring of a developing and prosperous economy in the nation by securing a low EI and energy dependency the rational interests. The hypothesis assume the economic factors have played an essential role in how the RED is followed, presented in H1a below.

*H1a: The economic factors in Poland does not create incitement for the government to focus on renewable energy policies.*

<sup>2</sup> Andrzej Ancygier, interview 17 april 2020

<sup>3</sup> Jon Birger Skjærseth, interview 28 april 2020

### **Societal factor**

Every democratic state is ruled by elected leaders chosen by the public. The societal factor aims to investigate how the public opinion affects the constellation of national interests in terms of advocacy and voting figures. The availability of options is mentioned as a crucial part when determining interests, which makes the political agenda of the ruling party and the most significant opposition important to investigate. Voting figures can further indicate how these preferences have changed in terms of what is important for both the people and the parties. How long the ruling party has been in power might also indicate that the energy policies of today are in line with public opinion.

The theoretical framework assumes public opinion plays an important part, as does the political opposition, as the ruling party acts in accordance to the interests that maximise their chances to both comply with the public as well as to keep their position in power. The following hypothesis describes the assumptions taken from this section.

*H1b: The public opinion does not give enough incentive for the political parties to focus on renewable energy policies.*

### **Public health factor**

The general goal for states can be assumed to seek to ensure the well-being of the people through the prospects of a sustainable future. Climate change is a threat to all countries, some more affected than others, and the health of the people is and will be directly affected. To reduce the levels of pollution and provide clean air for all is, therefore, assumed to be of rational interest. However, depending on what kind of energy sources are considered to be the most effective solution, thus maximises the interests in several areas at once, will steer the interests regarding pollution as well. When put in context with the theoretical framework, the health of the Polish people is assumed to be of highest importance, not only for the individuals affected but for the country as a whole as domestic development depends on healthy people. However, the factor is influenced by taking the outcome based on maximized result into account which results in the following H1c:

*H1c: The public health issues, due to pollution, does not give enough incentive to focus on renewable energy policies.*

The main hypothesis has now been divided into individual hypotheses connected to each factor, which makes up the mechanisms within the first part of the causal chain. In summary, the assumptions concluded in the general collection of interests is transmitting negative incitement in regards to RES and collectively leads to the third hypothesis:

*H2: The Polish government will implement the directive in accordance with the constellation of domestic interests, which is concluded not to give enough incitement to focus on renewable energy policies.*

## 2.4 Part II - Degree of Implementation

This leads to the second part, which investigates the degree of implementation of the EU RED on a national level in Poland. It is important to investigate to what extent the national law reflects the goals of the directive, as the purpose of the study is to understand what factors have led to Poland not complying with the goals. Therefore, it is relevant to identify and clarify what the definition of implementation is. Mazmanian and Sabatier define implementation as “*the carrying out of a basic policy decision, usually incorporated in a statute but which can also take the form of important executive orders (...)*” (Mazmanian – Sabatier 1983, 20). However, this can be understood differently depending on what political level is used as a starting point. From an international perspective, implementation can be understood as the first decision-making process, which translates international law into national law. For instance, the approval of the RED II in the EU as a way to implement the goals set to combat global warming by the Paris Agreement (European Commission 2018b). Implementation can also be understood as the actual, practical, enforcement ‘on the ground’ following the domestic laws or systems (Abbot et al. 2000, p. 402). Implementation is thus something that ‘trickles’ down through all different institutional levels (Skjærseth 2014, p. 9). So, the term implementation will, in this study, be used as the translation of international, in this case, the EU, directives into national legislative policies, a ‘top-down’ perspective, defined by Steuneberg “*a process in which political or administrative actors have to approve a proposal that converts a directive into national law*” (2007, p. 28).

### 2.4.1 Concept of Legalisation

Moreover, the concept of legalisation further defines how the degree of implementation is measured and stipulates the definitions above. The concept specifies three characteristics; obligation, precision, delegation. The first pointing to legal bounding behind the actual implementation, secondly, how ambiguously it is stipulated and finally how well delegated it is to a third party to apply further (Abbott et al. 2000, p. 401). I have also added timing as a mechanism as the directive was passed with an approved time limit, I, therefore, claim that *when* it was turned into national law also is of importance. This leads to the final hypothesis:

*H3: The four characteristics are not satisfactorily fulfilled, which indicates a failed implementation of the RED in terms of reaching the goals for 2020.*

## 3 Method

The section below aims to present the methodological considerations taken when choosing the method of process-tracing on a within-case. I further describe process-tracing as a method and how best conducted on the specific case. This leads to the operationalisation of variables and concretisation of important terms. Finally, the demarcations of the study and the material used are discussed.

### 3.1 Methodological Considerations

When conducting a research study on an interdisciplinary case which handles EU integration, domestic politics and environmental issues, there are several factors necessary to take into consideration, determine what methodological approach should be used. Firstly, it is essential to undertake some ontological and epistemological presumptions. The study is based on a positivistic assumption of reality, as I assume, that information of the world is possible to collect through observation and facts (Hollis 2002, p. 42). I recognise the limitations to understand the national interests fully and therefore, have the insight that a deterministic truth is not possible to comprehend as the political arena of a country and the underlying interests behind policy decisions are complex. I resign to the insight that there are other plausible causal mechanisms which are not possible to investigate in this study, which might alter the results. That is up to future, more detailed, studies to investigate.

Also, I am aware of the fact that I, when conducting a theory-based study, assume the subjective thoughts and definitions of the relevant discourse based on the theoretical framework which might affect the developed hypotheses and the final results. I, therefore, have the comprehension that complete deterministic results are not possible to reach, and neither intended (Beach 2017, p. 7, 8).

The study is not of experimental character, but rather of an intensive character to discover and understand the mechanisms between cause and effect, thus also explanatory (Torell – Svensson 2007, s. 77, 80). Stephen van Ervera explains an essential advantage of qualitative research is that it can answer the question of how something has happened or occurred, not only state it has happened (1997, p. 55). The data and results from this research can, however, work as a base for future quantitative research when, e.g. the implementation in another country is compared to the one in Poland.

Furthermore, the study is based on a single within-case, as case studies are considered to function well when the research aims to understand a specific case or an event on a qualitative level. A single case study has the advantage of enabling a more in-depth accuracy and precision for the one case, than a comparison study on several cases. Single case studies are, therefore, a highly regarded method for research within decision-making processes (George & Bennett, 2006, p. 22).

## 3.2 Process-Tracing

I have concluded the method of process-tracing being favourable, as the purpose of this study is to understand why Poland does not reach the goals set to 2020. Based on the assumption that the constellation of domestic interest, shaped by different influential factors, affects the degree of implementation of energy policies.

The method functions well when the aim is to investigate and trace the causal mechanisms that have led from cause to outcome, and through that detect spurious or indirect relations and prove the actual course of events expressed by hypotheses (George - Bennet 2005, p. 205). A strength of the method is that it has developed to be suitable for understanding both social and political phenomena, which additionally suits this research (Collier 2011, pp. 823-824). Challenges with the method of process-tracing, especially when investigating a case based on interests and policies, are 1) the inevitable risk of having to determine some mechanism based on induction, and 2) that a correct linkage between mechanisms might be inaccurate and thus affect the final result (George - Bennet 2005, p. 206). However, by systemising the study, by the conducting hypotheses, and distinctly delimiting the aim, it is possible to overcome and conduct a study with high validity and reliability.

The method of process-tracing is further well-adapted as single case studies have received critique concerning that the results do not convey much analysis if not compared to other cases. Process-tracing generates the possibility to establish a more fundamental connection between the cause and outcome, which creates a foundation for a lucrative analysis despite the study on a single case (Esaiasson m.fl. 2012, s. 109). This increases the relevant aspect of not only describing the case when performing an explanatory study, as it contributes to both validity and scientific value and not fall under the so-called 'storytelling-issue' (Vanhala 2017, p. 94; Schimmelfenning 2018, p. 99).

This study is 'forward tracing', based on a minimalistic understanding of the mechanisms. Meaning that each step is not studied in detailed, but the interplay between mechanisms are identified, assumed and interpreted (Beach 2017, p. 4). It is also theory-testing since the theory is applied to the assumed process (Esaiasson et al. 2012, pp. 129-130).

In conclusion, a well-executed process-tracing, which connects the causal effect to a theoretical aspect, on a single case study does provide a high level of

validity and is considered to show causality. The goal of carrying out a process-tracing is to understand what has transpired between the cause and outcome by identifying causal mechanisms through empirical evidence. Concretely, what influential factors have impacted the degree of implementation?

### 3.3 Operationalization

Defining the variables is of importance as the connection between two variables is the aim of the research. The role of the variables is to frame the contents of analysis and help detect the causal mechanisms (Ancygier 2013, p.62 - Beach 2017, p. 6). The independent variable and the starting-point of the study is set to the passing of the RED in Poland, more specifically when it was passed into national law 2015, as the Act on Renewable Energy Sources ('RES Act', Dz.U. 2015 poz. 478) took effect in Poland. The dependent variable, the outcome, is, in turn, the Polish failure to reach the goals set to 2020 by the RED.

It is necessary to translate the nominal concepts into measurable and definable operational indicators to enable the investigation. An operationalisation thus connects the theoretical framework and specifies the frame of which the method should assume. A well-executed operationalisation also assures a high result validity (Esaiasson 2012, p. 64-65).

The nominal terms relevant to conceptualise for this study are the mechanisms described in the theoretical section defined by the theoretical framework. To be able to measure these it is necessary to transform and define the factual indicators, being what to look for in the next section.

Part I is defined through the concept of interests, and the three political factors, the indicators for each factor is as follows: The indicators regarding the economic factor will be the Polish GDP including the EI, compared to itself and other EU countries. Cost related to the different energy sources is also of importance as that indicates what the government invests money on. The societal factor will be examined through indicators that show how the public opinion affects the governmental interests, thus by statistics from the latest elections, voting figures and party positions. The last factor handles public health, which will be investigated through figures on pollution levels in Poland and the effect this has on the residents. This factor further includes the indicator of a general long-term desire to secure a sustainable future which will ensure the health of the Polish people. All indicators presented above will be investigated by identifying expressed opinions by using statements, statistics and information from reports.

Part II is operationalised through the concept of degree of legalisation presented in the theory chapter. The operationalised indicators are thus based on the four characteristics presented, and operationally explained in the theoretical section. In practice, this means to invest and evaluate the actual national Polish laws legalised in order to meet the goals of RED.



The practical execution of the process-tracing is based on the presentation of empirical evidence connected to the mechanisms presented above, which leads to either strengthen or weaken the assumptions described in the hypotheses.

### 3.4 Material

The collecting and interpretation of the material are of great importance in a process-tracing in order to ensure intersubjectivity and reduce the margin of error (George - Bennet 2005, p. 210). It is also stated that a great deal of information is needed to be able to create a mapping of mechanisms (Esaiasson et al. 2012, pp. 129-130). The material used in this study is statistics, statements and information taken from official websites and articles. Supporting the document for the study is a wide range of official documents from both the European Commission as well as from Polish political parties, the government, energy industry and relevant associations as well as various research papers which have examined the Polish renewable energy transition. Expert-interviews have also been conducted, with Dr Ancygier and Prof. Skjærseth, providing me with up to date information and insights. I have also had contact with the Director of the Polish Department for Renewable Energy, Mr Piotr Czopek.

### 3.5 Demarcations

I have made demarcations to enable the completion of the study in terms of timeframe, political factors and legislative documents.

The timeline set up for the study is limited from the passing of The RES Act 2015 till today, the year 2020. However, since the interests of different actors are to be investigated, it is of importance to include events and legislations that occurred before the election of 2015. The timeline further limits the study by not significantly including the new RED II from 2018, which presents the common EU goals set to 2030. The study is further limited by the factors presented in part I; these are made in order to narrow the study to focus on, what is assumed to be, influential factors within Polish energy policies. The focus is thus not the policy process in itself, as that requires a more detailed investigation, but rather the main influential factors. Therefore, details regarding technicalities about the construction of energy sources is not included.

# 4 Empirical Evidence

The following section lays out the empirical evidence developed with the mechanisms and operational indicators through connections to the theoretical framework. It is divided according to part I and II.

## 4.1 Part I

### **Economic factor**

Poland is one of the ten largest economies in the EU, and the largest of the OEEC countries, and has had a steadily growing economy since after the fall of the Soviet Union in the early '90s when the economic system was changed entirely (The World Bank 2020; Bogdan 2015, p.3). The nominal GDP measured in the last years in Poland shows a positive growth rate, which even suggests a general economic growth higher than the average in the EU (OECD 2020). However, the GDP per capita in Poland is an average of 30% below the EU-28 average, indicating a clear difference to other European countries, e.g. the Czech Republic only shows 10% below and Germany 20% above (Eurostat 2019).

As mentioned, the measurement energy intensity, EI, is an indicator of the possibility to ensure economic growth. The Polish EI has seen improvements in the last decades but is still behind in comparison to the EU, with only Estonia and Bulgaria having markedly higher values in 2017 (EEA 2019; World Bank 2015). The high number is the result of the continuous use of the same energy mix being set to mainly coal, oil and natural gas, unique in Europe in terms of the high usage of fossil (IEA 2016; Gawlik 2018).

Poland never developed nuclear power plants, unlike most of their neighbours, another reason expressed by the Polish government, to why coal still has such a big part in the energy mix (Czopek 2020). The decision to develop nuclear energy has, therefore been a mission for several years. It is said to have had repercussions for the development of RES as it has been seen as the most efficient and feasible solution, after coal, in comparison to other green solutions. A goal still negotiated in Poland as a 'green' solution compared to coal (Ancygier 2013, p. 183).

Except for coal, natural gas is a largely used energy source. About  $\frac{3}{4}$  of Poland's natural gas consumption is imported, and 70% of that from Russia (CIA 2020; Augustsson 2019). The Polish government has expressed a reluctance to depend on the former Soviet Union. The Polish gas-contract with Russia expires in two years

and a replacing system by buying gas from Norway is already underway. The government is aware of the contractionary decisions of investing further in another fossil fuel, gas, but mean that the perks are twofold; reducing the dependency from Russia, which is favourable both economically and of security measures, as well as the usage of gas reduces the pollution in Poland and surrounding areas (Augustsson 2019; Shotter 2019).

The backbone of both the Polish economy and of their energy security, intensity and dependency, is the coal. A reality Poland seems to stick to as data states the coal reserve will last up to 150 years ahead, if not longer (IEA 2016). “*Our energy security is and will be in the long perspective based on coal (...)*” (Tchorzewski in Barteczko 2018), stated the Energy Minister Krzysztof Tchorzewski about the future. This goes hand in hand with the interests of the largest energy industries, mainly owned by the state through four energy groups; PGE, Enea, Energa och Tauron. The largest group, PGE, stands for 40% of the Polish energy. The current president of RED Wojciech Dąbrowski stated that it is ineligible to reduce the baseload of conventional energy and invest in RES as the primary task for PGE is to ensure Polish energy security which requires conventional sources (Barteczko 2020). A statement further established in reality as PGE opened two new coal power plant units in November 2019. The first new units built in 25 years, an initiative started by the former Prime Minister Donald Tusk (Ancygier 2020). At the same time, the EU releases reports on how to implement the complete phase-down of coal until 2050, where four out of the ten most important power plants to close down are Polish (Climate Analytics 2017).

Finally, an important variable to mention when discussing the energy sector in Poland is the impact it has on the labour market. Direct employment in the coal-mining sector has plunged from 388 thousand miners in 1990 to as little as 82.7 thousand in 2019, today merely 21% of the early 90’s reality. However, still an essential employer in many Polish cities, an argument used for the construction of the new coal plants opened last year (Czopek 2020; GSI 2018).

### **Societal factor**

The general public opinion towards climate change in Poland is varied. Studies from 2018 show that over 50% of the Polish population believes climate change is a threat, but only 34% believe that actions toward a solution have to be taken immediately (Poland Today 2018). The Polish people have a lower attitude towards climate change than the total of Europeans, according to EU reports from 2018 measuring Europeans’ attitude towards climate change. The proportion who believes the reduction of fossil fuels are important and believe the government needs to take action towards the aim of climate-neutral EU in 2050 is relatively high, between 70-80%. However, a difference of 10% lower compared to the opinion of the rest of the EU. The numbers have changed towards a higher percentage of concern compared to the same report from 2015. Nonetheless, Poland has also shown one of the highest percentages answering the question of whether it

is possible to reduce the climate change process, meeting up to almost 40% saying that it is not possible (European Commission 2019).

Poland is a democratic state with a parliamentary republic system ruled by the government, and together with the two chambers, the Sejm and the Senate, the political interests are based on the public votes (Sejm Rzeczypospolitej 2020). Two parties have been ruling Poland during the 21st century. The conservative-populistic party Law and Justice, PiS, has ruled with a one-party cabinet since the election in 2015 and won again in 2019. The most prominent opposition is The Civic Platform, PO, a liberal party which has been led by Donald Tusk since it was created in 2001 (Ancygier 2013, p. 207). The main differences between the parties are the social base, the way they rule and their attitude towards the EU; where PiS is more conservative, confrontational and authoritarian than the PO. The more liberal stand of PO, however, should be understood in comparison to PiS (Gwidaza 2016, p. 62-63).

The climate and energy policies have been relatively similar between two otherwise significantly different parties. For instance, the wish to implement nuclear power, the importance of keeping the energy industries state-owned and the belief in coal as insurance for energy dependency (Ancygier 2013, p. 247).

The Civic Coalition, CC, was created after the last election with the PO and three other liberal parties, including the only Polish green party. The coalition is recognised as a way for PO to market themselves in even more liberal manners to win votes. The Green party only gained three seats in the parliament, seats they have not had in several years (Partia Zieloni 2019). PiS has won the last two parliamentary elections, 2015 and 2019, with a majority of around 40% while PO, and the CC, has come in second with around 25% (Politico 2019).

The general support for more extensive governmental changes has increased the last couple of years as a new wave of, especially, youth movements have been seen in Poland and the rest of Europe. Large protests have been performed with an articulated demand for a ban on the burning of coal and the abolishment of the nuclear plans, among other issues. A general disaffection towards the slow implementation of RES is expressed, e.g. seen in the following quote expressed by activist Urszula Zielińska “*[The government] is changing literally nothing. [Their proposed environmental policies are] just like moving chairs on the sinking Titanic [...] Literally, that’s how their policies will look when implemented*”, (Zielińska in Broszkowski 2019). The awakening of the public can also be seen in the public as Poland had the highest number of voters in the general election 2019 (Grosse 2019).

### **Public health factor**

Poland is the largest air polluter in the EU, responsible for 24% of the total emissions in 2014 and similar numbers in 2019 as Poland owns four of the largest coal power plants in the EU and one of the largest in the world (EEA report 2014; EEA report 2019). The pollution has a massive impact on the Polish people, as 33 of Europe’s 50 most polluted cities are located in the country. Studies have shown

that air quality in Poland is equivalent to smoking 10 000 cigarettes/person a year. This can be put in relation to the approximate number of 4,2 million premature deaths annually attributed to outdoor air pollution in the world (Chudzik et al. 2019; WHO 2018).

The Polish government states essential measures to reduce pollution levels are underway in the large scale energy industries through the building of new gas lines and the construction of nuclear power plants. Even though gas still is based on fossil fuels does it not affect nature and the air in the same way as coal, same for nuclear, even though the environmental impact is discussed (EEA Report 2019; Augustsson 2019).

The burning of coal is a big reason for pollution; however, a high level of pollution derives from the private usage of coal-burners to heat homes (ETRI 2018). This is connected to the economic factor as a large part of the population cannot afford to replace obsolete heating systems (Nabrdalik - Santora 2018). Statistics show that 11% of the Polish people believe the health issue is one of the most important questions in Poland right now (IRI 2017, p. 9). The sale of non-emission controlled heating systems was banned in 2019, and ongoing regulations forbidding the burning of coal and wood for private heating measures are believed to have a great impact (Banos Ruiz 2019).

## 4.2 Part II

The second part aims to present empirical evidence relevant to the investigation of the degree of implementation. As the total implementation of the RED transposition in Poland took 40+ legal acts, I am limiting the evidence to the main document and two debated additions to the former (Euro-LEX 2020). The main one is the RES Act, drafted to place the most important RED provisions in one homogeneous act of law, the second is the so-called Distance Act limiting the construction of on-shore wind power and finally the Act on biocomponents and liquid biofuels. These acts are chosen as the RES mix mostly is based on biofuels, 67%, and wind power, 14% (Statistics Poland 2019).

The legal transposition has been called a bumpy ride in Poland as the RED was not legally transposed domestically by the EU deadline of the end of the year 2010 but five years later (Skjærseth 2014, p. 25). Resulting in a referring to the Court of Justice by the European Commission and Poland passing a temporary ‘minimum’ solution in 2013 while paying a fine until the directive officially was turned into domestic law (European Commission 2013). The delay was grounded on the discussion of how to make the energy transition as safe and beneficial for Poland as possible (Ancygier 2013, p. 337). When the RES Act was passed in Poland, its primary focus was the establishment of different support systems to encourage RES production (RES Act 2015).

Further, the Act on biofuels regulating the production and manufacturing of biocomponent and biofuels through terms and conditions has been in place since 2006 but amended several times in order to follow the conditions of EU RED. However, it has received complaints regarding loopholes, making it possible for Polish fuel market stakeholders to exploit economic advantages which hurts biofuel actors in other EU countries (Bioenergy International 2017). A problem that made Poland be referred to the EU Court of Justice in 2016 as biofuels only is an acceptable RES if accurately following EU law (European Commission 2016).

The Distance Act from 2016 is a regulated addition to the RES Act stating requirements for the necessary distance of wind farms from residential buildings. The Act has been accused to put up administrative hinders which makes the application process for permit permissions complicated and uncertain as it involves several authorises and steps, leaving many applications declined (Dz.U. 2016 pos. 961; Dorina 2016).

Furthermore, the RES act has been aligned to limit the production of RES economically, and concerns have been expressed as to how specific the eligibility of the support mechanisms are. For example, the RES Act excludes already existing RES installations, from the date the Act was put in force January first 2016, from receiving the same support mechanism as the ones installed after the same date. The green certificate, possible to retrieve for a period of 15 years, was thus withdrawn to already installed RES. This resulted in delays of constructions of RES as producers waited in order to pass within the timeframe, also making modernisation of already existing installations more unprofitable. The same goes for the possibility to take part in auctions regarding feed-in tariffs (RES Act 2015; Derski 2018). Some of the requirements, like the example above, is presented in a manner that leaves doubts as to what the governmental interpretation is as it instead of contributing to the construction of RES has made it more difficult and unprofitable. This, in connection to the Distance Act meant investment in the wind sector unviable (Norton Rose Fulbright 2016).

The actors mostly in charge of the incorporation of the RES Act are the following ministries: Ministry of Economy, Treasury, Environment, Energy and Climate. The division of policy areas is a remnant from when energy policies mainly circled around coal with connections solemnly to the economy. As more regulations and EU directives have come along new Ministries have been created, resulting in a fragmented government (Ancygier 2013, p. 171).

Since PiS has been in power, several administrative changes have occurred within the Polish government. Two significant changes have been the creation of the Ministry of Climate and the decommissioning of the Ministry of Energy. The former was created last year and is currently the leading body responsible for energy policy and the national energy and climate plans; the ministry is considered to have a relatively substantial influence on the energy policies (Olszewski 2019). The minister, Michał Kurtyka has been called "*not the worst person to deal with climate in Poland [...] someone else could have done it better, but few people in Poland could have done it better*" (Ancygier 2020). Decommissioning of the Ministry of

Energy is seen as a way to once again turn more of the power into the Ministry of Treasury, which will now be in charge of policies regarding energy and mining questions. Hence mostly concentrating on the coal-sector as the same ministry is the large part-owner of the four energy groups (Barteczko 2019).

However, several of the regulations put in place through the RES Act have later been changed through the RES Amendment Act from 2019 with goals set to 2040, where several regulations are less strict. This indicates that change might be moving in a more RES friendly direction and that significant differences will be shown but after 2020, amongst large investments in off-shore wind (Czopek 2020; Forum Energii 2020).

# 5 Analysis – Revisiting the Hypotheses

This section aims to investigate the empirical evidence in relation to the assumed hypotheses, and thus the theoretical framework, in order to enable an answering to the research question.

## 5.1 Part I

The empirical evidence shows an interesting contradiction in the Polish interests compared to the EU as the same arguments the EU uses to implement ambitious goals in the Union, Poland uses to halt the same development. The evidence exhibits that the arguments presented by the Polish government; the economic growth and the importance of energy security, is in line with H1a as it claims the economic factors will not create enough incitement to invest in RES. Rather it points to the opposite as they argue that 1) Poland cannot afford to implement ambitious energy goals 2) the economic growth seen in the country will lead to a rise in energy demand which forces the government to focus on the sources that generate the most energy-efficient, meaning coal and nuclear. However, the evidence points to different interpretations of the economic situation as RES would be a long-term investment. However, the Polish national and governmental interests are set in their traces and will continue to promote conventional sources.

The evidence also points to the importance of the state-owned energy industries, which focuses on fossil sources and thus would have economic repercussions if altered. This is further connected to the importance the coal business has had on the labour market, and in large part for the Polish identity, as the government gains voters from a large part of the people by supporting coal.

I, therefore, claim it is possible to state that the hypothesis is plausible and gives the government incentive to focus on energy sources that are already established and the reconstruction of these instead of investing in entirely new renewable solutions.

Further, the evidence presented concerning the societal factor shows the current political system is considered to be the right way forward as PiS has won, with a clear majority, the last two elections. This subsequently indicates that the interests of both the people and the government is being maximised through the current energy policies. If the people do not contradict to a large extent, then why would the government change its way to rule? The government in a democracy needs to keep the balance between pleasing the people to be re-elected and push for



their beliefs. As of right now, it is not a very challenging position for PiS as they still have the support from the people despite, or perhaps precisely because of, their policies. The claims of H1b is, therefore, strengthened through the empirical evidence.

Interesting, however, is the rise of a pronounced youth movement, indicating that the environmental issue and reduction of coal as the main energy source, might get more questioned in the future. This does even further meet the expected assumptions expressed through LI and in H1b, that the interests of some actors are not influential enough.

The fact that this change did not show in the 2019 elections, as the opposition to PiS, the CC, did not receive a significant raise of votes even though the only green party in Poland is a part of the coalition, indicates that the new environmental attitude is not influential enough, or perhaps not established as the most important issue when putting in perspective with other domestic issues in Poland. Voters thus show that even though they consider climate change an important question, it is not enough to change their votes. The evidence thus points to the connection to H1a as the economic situation is prioritised prior to regulations towards greener energy.

The claim of H1c is connected to the health of the Polish people and the incitement from the government to change to RES in order to secure this. The empirical evidence shows other measurements taken by the government, which also decreases the pollution levels. As the private use of coal is one of the large contributors to high pollution levels, regulations against these are seen as the most effective solution in the short term. The investment in natural gas and nuclear is seen as the long term solution. This indicates the statement made in H1c is strengthened as the interests are maximised through other solutions than reducing the coal mining.

The factor of public health is further strengthened as it gives incitement to the government to continue with conventional sources, both as it is possible to point to the usage of private ovens as the problem, and not the coal industry, and that the cost of construction of RES would impose on the energy prices paid by the private owner. The economic factor thus plays an important role as well. According to LI, the high percentage of Polish people rating health as the most important issue would further enable the continued usage of conventional, only not the usage of coal, but from gas. However, as energy from RES would be a cheaper and more environmentally friendly alternative, in the long run, the H1c is contradictory. It is thus possible to argue for both the accuracy of the hypothesis as well as the inaccuracy as the public health gives incitement for governmental action, but not necessarily RES.

To summarise, the empirical evidence above can be considered to have concluded the three partial hypotheses to be accurate, even though H1c both weakens and strengthens the incitement for RES. Nevertheless, the aggregated assumptions of the influential factors lead to the premised second hypothesis to also be assumed to be strengthened. I, therefore, proceed with the second part of the

analysis, the conjecture of the governmental position in accordance with H2. The governmental position is assumed to be grounded in rational interest-driven behaviour, meaning the interests presented above will be mirrored in the actual implementation of the RED into national law.

## 5.2 Part II

From the empirical evidence in part II it is possible to detect extensive legislation in regards to RES. It is also possible to detect flaws in regards to the concept of legalisation.

Firstly, the obligation concerning the time limit set by the EU to pass RED into national law can be connected to the misfit of status quo leading to negative implementation, mentioned by Skjæreseth and presented in the theory as ‘goodness-of-fit’. As Poland was against the RED, it is possible to conclude that the internal disagreement stalled the implementation and therefore delayed the project of RES investment for five years. Connected to LI does this show an intern struggle of domestic interests, it also makes it possible to claim that the criteria of timing are not fulfilled.

The empirical evidence also presents that loopholes are possible to use, the statutory administrative framework is complex, and the indecisive wording makes the interpretation not entirely clear nor explained by the government. As all of these factors have made the construction of RES more complicated, it is possible to points to omission regarding precision. This is further possible to connect to the opinion of the climate movements, which states that the legislation exists but does not entirely create change. As this is connected to the level of obligation of the law, it is another criteria assumed to be weak.

As the evidence shows, the Polish government has divided the different parts within energy policies between several ministries and departments which has led to not only internal disputes but in the long run to delays in implementation. This can thus be connected to delegation and precision as both fail when a system does not work. An assumed conclusion is therefore that the Polish institutional framework and the belief in coal as an essential factor for economic and energy security, has made the energy policies delayed, unclear and regulatory steered by the interests of the government.

In summary, as presented by the empirical evidence, it is possible to declare H3 strengthen; the characteristics of the concept of legalisation can be assumed not to have been satisfactorily fulfilled which in extension affected the degree of implementation in Poland and thus a large factor to the failure to reach the 2020 goals.

## 5.3 Summary

**Table 1.** Summarising the causal connection between the variables following the theoretical framework, empirical evidence and evaluation of veracity of the developed hypotheses. The first square concluding the main hypothesis.

	Hypothesis	Theoretical connection	Empirical evidence	Conclusion
<b>MH</b>	<i>The constellation of domestic interests considerably shapes the translation of EU Renewable Energy Directive into national law and has thus influenced the failure to reach the goals set to the year 2020.</i>	-Domestic status quo is not in line with the EU, which influences the constellation of interests and the most desired outcome.	<i>Following the empirical evidence of H1-H3.</i>	<b>Concluded to be strengthened as a low level of ambition, indicated from the constellation of interests, to follow the RED has resulted in a low degree of implementation.</b>
<b>H1a</b>	<i>The economic factors in Poland does not create incitement for the government to focus on renewable energy policies.</i>	- Ensuring a developing and prosperous economy in the nation by securing energy dependency and intensity.	- Economic growth shown thorough GDP. - Below average GDP per capita. - Relatively high EI. - High dependency on coal. - State-owned energy companies.	<b>Concluded to be strengthened</b> -Argues that the importance of economic growth and energy security unables the fast transition to RES. - The importance of the coal sector is valued high.
<b>H1b</b>	<i>The public opinion does not give enough incentive for the government to focus on renewable energy policies.</i>	- The public opinion plays an important part, as does the political opposition, as the government strives to be reelected and please the Polish people	- Only 34% believe actions needs to be taken against climate change. - 40% believe it is not possible to make a change. - Dominant political actors. - Low support for green party. - Beginning of a new climate opinion through youth movements.	<b>Concluded to be strengthened</b> - The Polish people does not contradict in a large extent. - The new movements is not influential enough. - Does not give the government incitement to change the energy policies.
<b>H1c</b>	<i>The public health issues due to pollution does not give enough incentive to focus on renewable energy policies.</i>	-Public health and clean air provides economic stability in the long-run, however, the effective solution does not have to be reducing coal.	- Largest polluter in the EU. - Massive health consequences. - Private heating systems based on coal. - Investment in gas and nuclear.	<b>Concluded to be strengthened</b> - Public health is important. - The coal mining is not the only polluter. - other solutions than RES is detected and suits the national interests to a greater extent.
<b>H2</b>	<i>The Polish government will implement the directive in accordance with the constellation of domestic interests, which is concluded to not give enough incitement to focus on renewable energy policies.</i>	-The constellation of interests influences the status quo and thus the governmental position, leaving a negative/positive policy feedback.	Following the empirical evidence in H1a-c:	<b>Concluded by H1a-c:</b> -The constellation of interest does not give enough incitement to focus on RES.
<b>H3</b>	<i>The four characteristics are not satisfactorily fulfilled, which indicates a failed implementation of the RED in terms of reaching the goals for 2020.</i>	The national interests are not in line with the directive, which will result in a low degree of implementation.	- Obligation as EU member. - Delayed five years. - Loopholes in biofuels law. - Economical disadvantages to construct RES. - Administrative changes and many actors involved.	<b>Concluded to be strengthened</b> -As the empirical evidence shows that the four characteristics are not satisfactorily fulfilled.

## 6 Conclusion

The purpose of this study was to understand why Poland will not reach the binding goal by 2020 set collectively by the EU. By applying the main theorized hypothesis derived from the theoretical framework of Liberal Intergovernmentalism, it has been possible to conduct a theoretically guided investigation of the passing of the RED into national law in Poland, to the failure to reach the fixed goal of a total of 15% RES in the energy mix for 2020.

The answer to the research question of what factors have influenced the Polish failure to reach the EU Renewable Energy Goals by 2020, is that the influential factors; economic, social and public health, have all had a large impact. By testing the theoretical framework, I have concluded that it is has been able to explain the outcome by assuming the interests behind influential factors within the Polish energy policies. The strong dependency of coal in all of the presumed factors have been established as one of the strongest influences behind the low degree of implementation of RES in Poland.

Part I concludes that the constellation of interests does not give enough incentive for the government to invest in RES. Mainly the economic factor as it is closely linked to energy policies. The social factor has showed that the lack of public opinion against Polish governments policies has not demanded a change as the government, PiS, is still the ruling party. It thus states the low level of ambition from the government to follow the EU RED, which the theory refers to as the as ‘goodness-of-fit’, the negative policy feedback following a mis-match in *status quo*. The hypotheses in part II further established that the concept of legalisation had been unsatisfactorily fulfilled, resulting in a low degree of implementation.

The research has, therefore, contributed to establishing further understanding of the Polish energy polices in particular, and the complex implementation of an EU directive in general.

## 6.1 Further research

The purpose has not been to evaluate the policy process on a detailed basis, but to paint the overall picture of what factors interplay as essential mechanisms when ambitious climate goals are taken and implemented in an EU member country. The method of within-case process-tracing has its limitations in generalization, to be able to further strengthen the general assumption of this study, further research is desirable in order to establish the theory LI on studies investigating national interests.

Furthermore, in order to fully understand the governmental position it is therefore essential to take both historic and global factors into consideration. I recommend further research to continue on the topic and investigate the influential factors in detail and compare the results to alternative explanations. Another interesting aspect is to put the Polish energy interests in relation to the interests of the EU and, instead, conduct a bottom-up research of how the EU directives have been influenced by a 'Polandization'. This to investigate how future climate and energy goals might develop in both the negotiation state and the actual implementation in the member countries.

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