# Implementing International Climate Treaties into Dutch National Policy

## A model-guided analysis on climate policy implementation in the Netherlands

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# Abstract

In recent decades, the Netherlands has committed itself to a number of international agreements that aim at reducing global warming. Even though the Dutch government has expressed the urgency of climate and action and its concerns regarding global warming, the Dutch NGO Urgenda Foundation found that the Netherlands did not do enough to fight global warming and tackle climate change. The Urgenda foundation law-suited the Dutch State, and the court ruled in favour of Urgenda, stating that the Netherlands had to reduce greenhouse gas emission with at least 25% in 2020 relevant to the level of 1990.

A crisis was caused in the government, since the government was far from reaching this goal. But how could the government led this develop into this crisis? Several policy decisions had been made in the decades before 2020, which are analysed in this research. By using models collective decision-making and policy implementation, an answer is provided for why international climate targets were not implemented fully in the Netherlands.

This study answers the research question: *How can it be explained, using models of collective decision-making and policy implementation, why the Dutch government in the period between 2012 and 2020 did not take enough action in the electricity sector of the Netherlands to be compliant with international climate goals?* The main findings of the study are that the extent to which discretion as granted the implementers was too high and due to a lack of political control, the implementers could pursue their individual preferences instead of implementing the political decisions as intended.

# Contents

# 1. Introduction

This study focuses on the decisions that have been made by the Dutch national government in the time period of 2012 to 2020. In that time, several different national and international events have defined climate policy in the Netherlands. However, a backlog of the reduction of greenhouse gas emission occurred, recognised by the Dutch court and the Dutch Supreme Court in the Urgenda climate case (Hoge Raad, 2019). Although the Urgenda Foundation and the Dutch State both agree that greenhouse emission needs to be reduced quickly, they do not agree on the pace on which this is happening. The Urgenda Foundation law-suited the Dutch State, which ruled in favour of the Urgenda Foundation.

The Dutch government defended the claim of Urgenda of not taking enough action by saying that it is ultimately focusing on the goal of 2050 to reduce 95% of greenhouse gas emission and, on a shorter term, the goal of 2030 to reduce 49% of greenhouse gas emission. Both these goals are agreed upon in the United Nations Framework Convention on Climate Change (UNFCCC), of which the Netherlands and 196 other countries are part of. Hence, the Dutch government was planning on reducing only 17% of greenhouse gases by 2020 (Schrijver, 2015).

The court stated that the State has not underpinned well enough how the Dutch State is going to achieve its own climate goals when less than 25% reduction is achieved by the end of 2020 (Hoge Raad, 2019). The Dutch court has based its judgment upon the UNFCCC (1992) and the care duty of the State as described in the European Convention on Human Rights (ECHR, 1953). According to the court, a high degree of consensus exists among academics and the international community about the urgency of reducing greenhouse gas emission with at least 25% at the end of 2020 (Gerechtshof, 2015).

The electricity sector accounted for 23% of the total emission of greenhouse gases in the Netherlands in 2019, which is similar to the amount of reduction of in the previous decades (CBS, 2020). However, the Dutch government has committed itself to reduce the emission of greenhouse gases in this sector. The result of this commitment was the Dutch Energy Agreement of 2013 (Energieakkoord) which has been formulated and concluded by 47 organisations. These included environmental organisations, labour union, employers organisations and the local-, provincial and national organisations. Most organisations that have an interest in the Energy Agreement were represented by their overarching representative organisations (Energieakkoord voor duurzame groei, 2013).

In 2015, the Paris Agreement was ratified at the COP21 by many countries, including the Netherlands. Subsequently, negotiations about a Dutch Climate Agreement started in 2018. Companies, societal interest organisations and governments were participants in these negotiations. This Climate Agreement was formally adopted by the Dutch government in 2019 and it aims to reduce the emission of greenhouse gases by 49% relevant to 1990 in 2030. The aforementioned Energy Agreement has been incorporated into the Climate Agreement as the chapter ‘Electricity’, without disbanding the agreements made in the Energy Agreement (SER, 2013).

In this study, a reconstruction of crucial moments in the decision-making process regarding greenhouse gas reduction is created. Eventually, an answer is provided for why the Dutch government did not start acting implementing international climate goals earlier, which could have prevented losing the Urgenda Climate Case, and to stay on track for the international goals for 2030 and 2050.

Several different models and adaptations to those models have been researched by scholars. These models have been used often for European Union decision-making or for general theories regarding the behaviour of political actors and implementation agencies in the policy space. This study attempts to combine the analysis of a collective decision-making process and an implementation analysis, taking into account international agreements as the basis for national policy. An analysis of a highly complex decision-making process with many informal and sometimes almost invisible negotiation processes is begin extremely simplified. By doing this, it is assumed to contribute to existing literature by combining several elements of different models to a multi-level decision-making and implementation process.

The main topic of this report is climate policy of the Netherlands. Currently, this is one of the most discussed and debated topic on each scale and every level everywhere. Moreover, at the time of writing this report, certain decisions have already been made, but most climate goals that are agreed now, are still years ahead. For good governance and realistic long-term expectations, it is important that pitfalls and earlier made mistakes that come forward in this study will not be made again.

The research question that is research in this study is as follows:

*How can it be explained, using models of collective decision-making and policy implementation, why the Dutch government in the period between 2012 and 2020 did not take enough action in the electricity sector of the Netherlands to be compliant with international climate goals?*

*Sub-questions:*

- *SQ1. What was the Dutch national decision-making process on greenhouse gas emission reduction in 2012, and what was the outcome level of discretion granted to the implementors of these decisions?*
- *SQ2. How was implementation of this decision between 2012 and 2020 organised: who were the implementors, how did they further bargain in the implementation process, and what was the level of discretion granted to them during the bargaining stage?*
- *SQ3. What were the performances of the implementors of the greenhouse gas reduction decisions between 2012 and 2020?*
- *SQ4. To what extent can we explain the policy drift between the original decision in 2012 and its non-realisation in 2020 from the elements in the model of policy implementation?*

# 2. Theory

## *2.1. Collective decision-making and policy implementation*

To study the implementation of policies regarding the goals for reducing the emission of greenhouse gases in the Netherlands in the electricity sector, it is necessary to look into different models of policy implementation. *Policy implementation* follows from a collective decision and it looks at how this collective decision is implemented by implementation agencies (Torenvlied & Akkerman, 2004). It is "the transmission of the outcome of collective decision making, the political decision, into the actions of one or more implementation agencies" (O'Toole, 1995).

Collective decision-making models are based on the assumptions of rational choice theory and they use similar conceptual frameworks to define the main elements of the decision that is under analysis (Thomson, Stokman, & Torenvlied, 2003). These models are based on the idea that the individual actors in the process of decision-making act rationally and according to their preferences of what the final outcome should be. Shepsle (2010) describes that the individual is the basic explanatory block of the model. The preferences, beliefs and saliences of the individual actors are necessary aspects that are used to fill in the model (Shepsle, 2010).

At the basis of models of collective decision-making and models of policy implementation lies the formulation of the different policy issues. These *policy issues* are defined as the points of discussion that are part of a larger overarching complex policy problem and to which the different actors involved in the decision-making process seek to find an outcome . These actors determine what their preference for the final decision is. These preferences or standpoints for a certain issue are the *policy alternatives* of the decision. The actors are assumed to be the proponents of the policy alternative they support and strive for their preference to be the ultimate outcome of the decision-making process by influencing the decision-makers they have access to. Some issues have only two different alternatives, which mostly means that the only outcomes on the table are a simple 'yes' or 'no'. However, it occurs most often that a policy issue has a number of policy alternatives, meaning that a decision can have several different outcomes (Torenvlied, 2000).

The policy issues are presented on a one dimensional policy scale, where the different policy alternatives are quantified and placed on the policy scale on the location that corresponds with the received value. On this policy scale, the political decision that has been reached is presented as the intended implementation and the actual outcome of the implementation or *policy performance* is the realisation of that decision (Torenvlied, 2000). If the content of the policy decision does not change during the transition from decision-making to implementation, the possible outcome of decision-making and the possible outcome implementation can be compared (Torenvlied, 2000).

It is assumed that each actor attaches a certain degree of salience to its preference of the policy alternative. *Salience* is explained as the importance and the priority actors attach to their position, and it 'describes the sharpness in the curvature of the actor's loss function' (Thomson, Stokman, Achen, & König, 2006). Torenvlied (2000) describes salience as a measure that indicates how strongly or weakly an implementation agency values the consequences of a difference between a policy alternative and its own policy position, hence it should be included in existing models of implementation. Agencies or actors that attach a relatively high degree of salience to a policy issue will more forcefully strive toward their own policy position in comparison with actors that attach a lower salience to that same issue. Therefore, the salience is an important factor for explaining an increase in the preference loss and the resources that are put into effect in the decision-making and implementation process to realise the own standpoint of the actor (Torenvlied, 2000).

Each actor that is involved in a certain issue is assumed to have a certain level of power. Power is described as *bargaining power* and *voting power*. The bargaining power is mainly focused on the informal power resources the actors have. These power resources include the number of people that are represented by this actor, the financial assets that are available to the actor to influence other actors, the reputation of the actor and so on. Informal power resources are mostly well hidden and invisible. On the opposite or formal powers, which is referred to as voting power in this study. The voting power refers to the official mandate to cast a vote, which is embedded and institutionalised in a particular system (Alsop, 2005).

### *2.2. Models for collective decision-making*

The expected utility model is based on non-cooperative game theory. It examines the construction and break-up of coalitions on different issues. Expected utility theory is widely recognised as being at the core of contemporary microeconomics and Mesquita (1989) has used this theory to develop a theory regarding decision making. The essence of this theory is based upon five assumptions, namely (i) individual decision-makers order alternatives in terms of their preferences, (ii) the order of preferences is transitive, (iii) individuals know the intensity of their preferences, with that intensity of preference being known as utility, (iv) individuals consider alternative means of achieving desirable ends in terms of the product of the probability of achieving alternative outcomes and the utility associated with those outcomes, and (v) decision-makers, being rational, always select the strategy that yields the highest expected utility (Mesquita, 1989). *Utility* means the profitability of the policy outcome, so the policy alternative yielding the highest expected utility will be most profitable for that certain individual, actor or organisation. Comparing that with the previous stated assumption by Torenvlied (2000) that the policy preference of a certain actor will always be the one being the most favourable for a certain actor, one could say that this assumption can be reconstructed by saying that actors will always prefer the policy alternative receiving the highest expected utility.

A second model for political bargaining is the compromise model, which is derived from the Nash Bargaining Solution. In the compromise model, a baseline prediction of the outcome of collective decisions is created by taking into account the same variables as the other two models described earlier, namely the actor's policy positions, the saliences attached to the issues and the bargaining power. However, it does not contain explicit propositions about the micro processes that lead to the predicted decision outcomes (Van Den Bos, 1991; Torenvlied & Thomson, 2003). Besides the critique this model receives, it is deemed as a model that generates more accurate predictions for the policy outcome than any other model that was tested by Thomson (2011). To predict the policy outcome, Thomson (2011) proposes an adapted Nash Bargaining Solution formula. This formula is formulated as:

*Equation 1*

$$outcome = \frac{\sum_i^n power_i salience_i preference_i}{\sum_i^n power_i salience_i}$$

The *outcome* represents the prediction of the policy outcome, the $power_i$ is the power of actor *i* from *n* actors, the $salience_i$ is the level of salience each actor *i* attaches to the issue and the $preference_i$ is the policy preferfence of actor *i*. The letter sigma (∑) means that a summation needs to be done for each actor for the relative part of the formula (Thomson, 2011).

*2.3. Model for policy implementation*

Several assumptions lie at the basis of policy implementation models. The first assumption is that implementers have substantive preferences. This means that each implementer has its own preference for the policy outcome, which is independent from the preferences of the other actors. Secondly, implementers aim to realise these preferences. Third, it is assumed that implementers have *single-peaked preference functions*, meaning that only one of the policy alternatives is their absolute favourite. The fourth assumption is that implementers have a policy position on an issue, and they attach a salience to this issue (Torenvlied, 2000).

Based on these assumptions, implementation organisations can have reasons to deviate from the decision that has been made in the collective decision-making process. Different measures of control can be taken to prevent organisations to deviate from the intended decision. They can be distinguished between *ex-ante* (beforehand) and *ex-post* (afterwards) measures. The ex-ante measures are based on the legislator selecting the agency and defining the *policy discretion.* Policy discretion is the limit that is given to the implementer to deviate from the political decision. The ex-post measures are based on monitoring and sanction, which influences the reputation of the implementer as a loyal agent, the monitoring and control of performances and the procedures for political control (Torenvlied, 2000).

Three different models for policy implementation are described here: the *political decision model,* the *implementers' preference model*, and the *mixed model*. The political decision model assumes that there

is no deviation between the political decision and the policy performance, even if that means that the implementer does not implement its own policy preference. This is not always the case, policy deviation happens often. The implementers' preference model assumes the opposite: it assumes that implementation agencies will always deviate fully from the political decision by realising their own policy position. An additional assumption is that implementation agencies are completely insensitive of their reputations, resulting from the absence of political control within the policy system. The third model, which is the mixed model, takes the middle-road. It assumes that implementation agencies attach a salience of or between 0 and 1 to their policy position, and it takes into account the *sensitivity* to political control, which is also a number of or between 0 and 1. In the mixed model, the policy position and the political decision influence the policy performance, since the implementation agency tries to optimise both the reputation loss and the preference loss.

From the theory, the following hypotheses have been derived:

Hypothesis 1: implementation failed because it was a continuation of bargaining without a proper decision that was put under political control.

Hypothesis 2: implementation failed because the initial decision granted too much discretion to important implementing organisations.

# 3. Methodology

### *3.1. Research design*

In this study, a model-guided approach is used to analyse the collective decision-making process in the electricity sector in the Netherlands. The models presented earlier allow for a reconstruction of climate policy decision-making in the Netherlands in a certain time period. The different elements of the model provide an overview of the situation at a certain moment. When the actors change their policy position or the salience they attach to a certain issue, the policy outcome might eventually differ from the earlier expected outcome. These differences are the leading focus points in this study that give an explanation for the implementation of climate policy in the Netherlands and eventually it will be the basis for answering the research question.

To answer the research question, an extensive literature review is conducted, policy documents have been used and interviews were conducted to gain sufficient knowledge and information for this study. The literature that is used for this study is mainly focused on models for collective decision-making and policy implementation, the policy documents are used for a creating the reconstruction and operationalising the elements of the models and the expert interviews have been conducted to get a more in-depth view on how to operationalise the elements of the models best for each actor that is present.

### *3.2. Using the models*

To analyse the decision-making processes regarding climate policy in the Netherlands, several models and their elements are used. Firstly, the compromise model that is derived from the Nash Bargaining Solution is used. This model provides a prediction of the outcome when given the positions, saliences and power of the actors that are involved, and it can be used when cooperative bargaining takes place without a formal voting. This model fits with issues two, four and five, since at these issues, the decisions are made at negotiation tables instead of in formal settings like the parliament. Moreover, the median voter theorem is used for the issues where formal voting power exists. The other models presented in the theory section are described to give an understanding of the influence of several models and the elements upon which the elements are based. Besides that, elements from policy implementation models are used to explain why the Dutch government was not compliant with international agreements, hence answering the research question of this study.

### *3.3. Expert interviews*

In order to get a good grasp of the policy regarding the reduction of greenhouse gas emission in the Netherlands and to understand the role of the involved actors, three interviews were conducted with experts and politicians in the field. The expert informants were selected on the basis of the role they have played in climate policy in the electricity sector and, more importantly, the knowledge and experience they have gained during the time of them being in that role. Two politicians belonging two different parties were interviewed, of which one is a member of parliament. The other politician has been active in several different roles when it comes to climate policy in the Netherlands, such as member of parliament, member of the cabinet, Queen's Commissioner and member of several different cooperative tables at which discussions were held regarding the creation of agreements to reduce the emission of greenhouse gases in several sector in the Netherlands. At the moment of the interview, the expert informant was retired from official political tasks. The third expert informant was involved in the Urgenda Foundation that law-suited the Dutch State in the Urgenda Climate Case and won the climate trial.

Semi-structured interviews were conducted with the expert informants to receive an answer to the sub questions of this study and to leave space for relevant topics that came to the table but was not included in the interview questions. Moreover, the expert informants were asked for their vision regarding the policy issues, policy alternatives, actors involved and the policy position, salience and bargaining power of these actors. These interviews were conducted via a telephone or videocall connection and took about 30 to 45 minutes each.

### *3.4. Generalisability*

By using the models of collective-decision making and policy implementation the study is deemed as generalisable. The models are standardised for collective decision-making and they are being applied to

the cases under review in this study. These models have been used more often in other case studies, and the models have been tested in different contexts (Thomson, 2011; Thomson et al., 2006; Thomson et al., 2003; Torenvlied, 2000).

### *3.5. Case selection*

The overall case that is selected here, is climate action, more specifically the reduction of greenhouse gases in the Netherlands. This case has been selected on the basis of the knowledge that was already present at the beginning of the study, which made it easier to conduct the analysis. Secondly, it is deemed as scientifically and societally relevant to conduct research for this topic, specifically in the Netherlands after the Dutch State lost in the Urgenda Climate Case trial. This trial was seen as unique in the world, therefore a special interest into the reasons for why Dutch climate policy led to losing a trial was raised (Schwartz, 2019).

### *3.6 Validity & reliability*

By using widely discussed models of collective decision-making and policy implementation, this study is assumed to have a high degree of validity. These models have been tested by many different scholars in different contexts and situations. However, most of the values of the elements used in this study are an estimation. Since these values have been presented to different expert informants, these values are expected to be truthful. Moreover, the models generally allow for slightly false values, as long as the values of each actor are relative to another actor are correct. It is expected that, by proposing the values of the elements to the expert informants, the order is correct. This ensures the reliability of this research.

### *3.7. Operationalisation and measurement*

In accordance with many collective decision models of which some were presented in an earlier section of this report, a number of elements need to be operationalised in the context and scope of this study. This section provides an overview of how different elements are used and measured.

In order to provide a reconstruction of the policy regarding the reduction of greenhouse gas emission in the electricity sector of the Netherlands, a number of relevant events were selected. These include international agreements and national events, which are explained in the section *case description.*

#### *3.7.1. Operationalising model elements*

The first main element that requires operationalisation for this study are the actors, the saliences, the bargaining and/or voting power and the policy issues with their belonging policy alternatives. Five different issues were selected, namely (i) the Urgenda Climate Case trial, (ii) national greenhouse gas reduction policy, (iii) coal power plants, (iv) windmill parks, and (v) tax on $CO_2$ emission. For each of these issues, a number of policy alternatives were drafted, which all derive from a policy position of each of the actors.

The actors that are presented at each issue were identified on the basis of their contribution to the decision-making regarding of the issue. Three different types of actors can be identified: (i) the participants of the climate tables, (ii) the cabinet and (iii) the political parties in the Dutch parliament. The participants of the climate tables have been grouped by the role they fulfil in reality and the policy position they express on a certain issue. This was done for simplicity of this study. The second actor, the cabinet, represents the executive power of the Dutch government. In reality, this was mostly one of the Dutch ministers of a representative of Dutch ministry. The cabinet as actor in this analysis is present at each issue. Third, the individual members of the second chamber of the Dutch parliament have been grouped by the political party they belong to. For each of the issues that was formulated for this study, the members of parliament had the same policy positions as every other member of their political party, and when a move in the policy space occurred, the members of parliament moved as political parties as whole.

The policy positions, the salience and the informal power resources of these actors were formulated primarily by analysing the voting behaviour if possible, and otherwise an estimation as made based on newspaper articles and other public data, such as the actors' websites. These elements were proposed to the expert informants, who informed about the validity of these policy positions. The same applies to the numerical weight given to each element. An estimation of the elements was proposed to the expert informants, who indicated whether changes had to be made.

The issues that are used for this analysis are primarily derived from existing debates and policy documents. The expert informants were asked which events and which discussions in the shaping of climate policy they deemed as most important in the time period of 2012 to 2020, and on that basis a selection was made to construct five different issues. Moreover, the issues were formulated to enable a chronological order of the analysis.

### *3.7.2 First issue: Urgenda Climate Case Trial*

The first issue used for the analysis in this study is the Urgenda Climate Case trial. The issue on the table during this trial was whether or not the Dutch State should reduce the emission of greenhouse gases by at least 25% or not. Two policy alternatives were on the table in this trial: the court would either rule in favour of Urgenda or it would be dismissed. The dismissal is seen as remaining at the status quo before the court-ruling, which is that Urgenda loses and the Dutch State is not legally obliged to abide by a target for the reduction of greenhouse gas emission. This policy alternative receives a value of 0 in the model. The alternative of the court ruling in favour of Urgenda is seen as the other end of the policy scale, which is why it receives a value of 1 the model. The Urgenda Foundation, the Dutch State and the court are the three identified actors for this issue.

*Table 1*

| Issue 1: Urgenda Climate Case Trial | | | |
|---|---|---|---|
| Actor | Policy position | Salience | Bargaining power |
| Court of law | 1 | 1 | 1 |
| Cabinet | 0 | 1 | 0 |
| Urgenda Foundation | 1 | 1 | 0 |

Policy alternatives:

0: status quo: State wins the Climate Case and is not obliged to reduce with 25% by 2020

1: Urgenda Foundation wins, State is obliged to reduce with 25% by 2020

*3.7.3. Second Issue: national greenhouse gas reduction policy*

The second issue that is recognised and used in this analysis is the shaping of national greenhouse gas reduction policy in the Netherlands. International climate agreements that intended to reduce global warming already existed for several decades and the Dutch State has taken some action into reaching international targets, however national agreements with concrete translations of international goals into national policy did not yet exist before the Energy Agreement of 2013. The issue *national greenhouse gas reduction policy* concerns mainly the agenda setting stage of climate policy in the Netherlands. This could also be called the implementation of the concerns regarding the lack of climate policy existing among several actors recognised for this issue. The presented alternatives are the decisions that were on the table before the Energy Agreement was presented in 2013. These decisions are rather seen as behaviour of organisations in this retrospective analysis instead of decisions that required a formal collective decision-making process.

Since the discussions regarding the Energy Agreement were focused on the reduction of the consumption of electricity, therefore reducing the emission of greenhouse gases, the policy alternatives for this issue refer to this electricity consumption. The first policy alternative, the status quo before the Energy Agreement, presents the preference of the actors that did not necessarily want to create policy that states targets to reduce the consumption of electricity. The first alternative receives a value of 0 in the model. Preferring the status quo does not necessarily mean that the actors did not see the necessity of climate action and moving towards an electricity sector that was polluting less greenhouse gases, but it represents the actors that did not take the initiative to actively draft policy or set targets to reach certain goals. The second alternative concerns the preference to set slightly progressive targets for the decrease of electricity consumption in the Netherlands, receiving the value of 0.5 in this analysis. These targets should not have an impact that would be too high, but more moderate. The third alternative presents more ambitious policy for decreasing the consumption of electricity. It is the most extreme policy alternative, therefore it receives the value of 1.

*Table 2*

| Issue 2: national greenhouse gas reduction policy agreement | | | |
|---|---|---|---|
| Actor | Policy position | Salience | Bargaining power |
| Cabinet | 0 | 0.3 | 1 |
| Environmental organisations | 1 | 1 | 0.9 |
| Electricity delivery companies | 0.5 | 0.85 | 0.6 |
| Corporate electricity consumers | 0 | 0.95 | 0.95 |
| System builders & operators | 0.5 | 0.8 | 0.5 |
| Employers' organisations | 0.5 | 0.6 | 0.65 |
| Labour unions | 1 | 0.7 | 0.75 |

Policy alternatives:

0: Status quo: no targets are set to decrease electricity consumption

0.5: set slightly progressive targets for the decrease of electricity consumption

1: set ambitious targets for the decrease of electricity consumption

*3.7.4. Third issue: law for reduction targets of greenhouse gas emission*

In 2015, the Dutch parliamentary parties GroenLinks and PvdA presented the initiative for a Climate Act. This law was meant for anchoring the goals for the reduction of the emission of greenhouse gases, to which the Dutch government committed itself in international agreements. However, the Climate Act was not yet adopted at that point. The aim of this Climate Act was to anchor a minimum reduction target for the emission of greenhouse gases of 55%. GroenLinks and PvdA were unable to establish a majority coalition on this issue, therefore amendments to this initiative for the Climate Act needed to be made.

Before the Climate Act was presented again in parliament, the coalition agreement of the Rutte III cabinet was presented in 2017. The coalition parties agreed upon a reduction target of at least 49% by 2030, which was in line with international treaties. In 2018, the Climate Act was presented in the parliament again. Several compromises were made, which lead to the following policy alternatives that are used for this study. First of all, staying at the status quo, meaning setting no targets by law, receives the degree of 0 on the policy scale. The second alternative is to set a target of 49% reduction of greenhouse gas emission and regulate it by law. Since this is already far from the status quo, it receives a degree of 0,5 on the policy scale. The earlier stated target of 55% reduction by 2030 and regulate this by law is the third alternative, receiving the degree of 0,7. The fourth alternative is to regulate the reduction of the emission by law and set a target of 65% reduction by 2030. This is the most extreme alternative, receiving the degree of 1.

*Table 3*

| Issue 3: regulate the reduction of greenhouse gas emission by law | | | |
|---|---|---|---|
| Actor | Policy position | Salience | Voting power |
| SP | 0.7 | 0.7 | 0.088 |
| PvdA | 0.7 | 0.8 | 0.053 |
| GroenLinks | 0.7 | 1 | 0.088 |
| 50Plus | 0.5 | 0,3 | 0.026 |
| PvdD | 1 | 1 | 0.032 |
| Denk | 0.5 | 0,3 | 0.017 |
| D66* | 0,7 | 0.9 | 0.125 |
| VVD* | 0.5 | 0,5 | 0.250 |
| SGP | 0 | 0,4 | 0.017 |
| ChristenUnie* | 0.7 | 0.9 | 0.032 |
| CDA* | 0.5 | 0.5 | 0.125 |
| FVD | 0 | 1 | 0.013 |
| PVV | 0 | 0.8 | 0.134 |

**parties in coalition Rutte III*

Policy alternatives:

0: status quo: do not regulate targets for reduction of greenhouse gas emission by law

0,5: regulate reduction target of 49% of greenhouse gas emission by law

0,7: regulate reduction target of 55% of greenhouse gas emission by law

1: regulate reduction target of 65% of greenhouse gas emission by law

### *3.7.5. Fourth Issue: Closing of coal power plants*

The fourth issue is the closing of coal power plants. In the coalition agreement of 2017 presented by members of the cabinet Rutte III, the closing of fossil fuel power plants was mentioned as part of the action plan to reduce the emission of greenhouse gases. Moreover, it has been part of the public debate more often and the Urgenda Foundation suggested to close down coal power plants to reach the emission reduction targets. This issue was mentioned by several different actors in the sector, from which the alternatives for this issue were derived. The status quo is the most conservative alternative, which refers to the option when no decision is made for this issue, meaning that the coal power plants that already exist, remain open. It receives the degree of 0 in the model. The second alternative represents a more moderate decision: restructuring coal power plants to enable the use of biomass instead of coal, directly removing the greenhouse gas emission of coal. This policy alternative has been a preference of some actors active in the electricity sector and it is seen as a relatively small change toward the reduction of greenhouse gas emission. Therefore, this policy alternative receives the value of 0.3 in the model. The third policy alternative is the closing down of coal power plants in the long run. This preference has been opted by several actors that were involved in the discussion, to compromise between reaching a reduction in the emission of greenhouse gas eventually, and also to partially protect large investments into the coal power plants that were already made. This option is not the most extreme alternative for this issue. However, it is not too far from entirely closing down the coal power plants on a short notice, which is the fourth alternative. Therefore, the third alternative that focuses on a longer time period

receives a value of 0.65 and the fourth value of closing down coal power plants on a short notice, risking the loss of investments, is seen as the most extreme alternative and receives the value of 1.

*Table 4*

| Issue 4: Closing of coal power plants | | | |
|---|---|---|---|
| Actor | Policy position | Salience | Bargaining/voting power |
| Cabinet | 0.3 | 0.8 | 1 |
| Environmental organisations | 1 | 1 | 0.95 |
| Electricity delivery companies | 0.3 | 0.95 | 0.45 |
| Corporate electricity consumers | 0 | 0.5 | 0.9 |
| System builders & operators | 0.3 | 0.3 | 0.4 |
| Employers' organisations | 0.3 | 0.9 | 0.6 |
| Labour unions | 0.65 | 0.8 | 0.7 |
| SP | 0.65 | 0.7 | 0.088 |
| PvdA | 0.65 | 0.8 | 0.053 |
| GroenLinks | 1 | 1 | 0.088 |
| 50Plus | 0.65 | 0.7 | 0.026 |
| PvdD | 1 | 1 | 0.032 |
| Denk | 0.65 | 0.3 | 0.017 |
| D66* | 0.65 | 0.9 | 0.125 |
| VVD* | 0.3 | 0.5 | 0.250 |
| SGP | 0.3 | 0.6 | 0.017 |
| ChristenUnie* | 0.65 | 0.9 | 0.032 |
| CDA* | 0.3 | 0.5 | 0.125 |
| FVD | 0 | 0.95 | 0.013 |
| PVV | 0 | 0.8 | 0.134 |

Policy alternatives:

0: Status quo (keep the coal power plants in business)

0.3 restructure coal power plants to enable the use of biomass instead of coal

0.65: Close down coal power plants in the long run to (partially) avoid loss of investments

**parties in coalition of Rutte III*

### *3.7.6. Fifth issue: Taxing the emission of $CO_2$*

As the fifth issue for the analysis, taxing the emission of $CO_2$ is used. Even though this issue is in practice relevant for many more sectors then only for the electricity sector, for the focus of this study the actors and policy alternatives for only the electricity sector are taken into account. The main reasons for this are the scope of this research, and that this issue has not been discussed and agreed upon in other sectors as much as in the electricity sector. Taxing the emission of $CO_2$ has been discussed widely on national and international levels and different actors involved in the sector have different preferences. Therefore, numerous policy alternatives would be possible, all with different specifications, some only in small details and others differ completely. Altogether, three policy alternatives have been recognised among the actors involved in this issue. The first policy alternative is the status quo. This would mean that there

is no taxation of $CO_2$, which is currently the case. However, many critics argue that it is inevitable to adopt some sort of $CO_2$ tax. A second policy alternative is to tax every ton of $CO_2$ that is emitted, but only above a certain threshold of emission, receiving the value of 0.7 in this analysis. However, it is not specified what the threshold is or should be. It is believed that a higher threshold would mean that companies are free to emit more $CO_2$ tax free, and a lower threshold would mean that companies cannot emit a large amount of $CO_2$ until the threshold is achieved. The value of 0.7 that is given to this policy alternative can differ in corresponding to a lower or higher threshold in practice. The third policy alternative is the taxation of every ton of $CO_2$ that is emitted, without a threshold, meaning that companies are obliged to pay taxes for each individual ton of $CO_2$ that is emitted.

*Table 5*

| Issue 5: Taxing the emission of $CO_2$ | | | |
|---|---|---|---|
| Actor | Policy position | Salience | Bargaining power |
| Cabinet | 0,7 | 1 | 1 |
| Environmental organisations | 1 | 1 | 0.95 |
| Electricity delivery companies | 0,7 | 0.95 | 0.4 |
| Corporate electricity consumers | 0 | 0.9 | 0.9 |
| System builders & operators | 0.7 | 0.5 | 0.3 |
| Employers' organisations | 0 | 0.6 | 0.5 |
| Labour unions | 0.7 | 0.8 | 0.65 |

Policy alternatives

0: Status quo

0.7: Taxing every ton of $CO_2$ emission above a certain tax-free threshold

1: Taxing every ton of $CO_2$ emission

### *3.8. Implementation of climate policy*

The implementation of climate policy in this study is defined differently than in many other studies. Implementation theories mainly speak of implementation agencies, which are for public policy normally ministries, government services, etcetera. For this research, the implementation agencies need to be explained in two-fold. First of all, when speaking of international agreements as climate policy, the states that have agreed upon these international treaties are referred to as the implementers. However, the scope of this study is on a national level rather than an international level of implementation. So secondly, the implementers can be defined as the organisations and institutions that are responsible for making efforts to reach the international goals. In this study, this is mainly the cabinet that needs to take measures. However, this responsibility is often granted to the actors present at the climate negotiation tables, primarily at the Energy Agreement (2013) negotiation and the sectortable Electricity of the Climate Agreement (2019). These actors are mainly the implementing organisation, whereas the Dutch government is defined as the political decision-maker.

# 4. Case description

In this section, a description is provided for the background of the climate policy in the Netherlands. The different international treaties and national agreement come across that are important to understand the entire climate policy framework.

### *4.1. United Nations Framework Convention on Climate Change 1992 and the Kyoto Protocol 1997*

The United Nations Framework Convention on Climate Change (UNFCCC, 1992) is seen as the treaty that puts global warming on the international policy agenda for the first time. Participating countries agree upon reducing the emission of greenhouse gases in order to reduce increase of the global temperature. However, the UNFCCC does not provide specific goals or targets for countries. It is a non-binding agreement and it is solely based on the intention to reduce the emission of greenhouse gases.

In the years that followed, participating countries discussed climate action each year at the Conference of Parties (COP). In 1997 the third COP was hosted in Kyoto, Japan, at which participating countries of the UNFCCC agree upon the Kyoto Protocol, which is a treaty that sets targets for developed countries for reducing greenhouse gas emission. 192 Countries ratified the protocol, including the Netherlands as part of the European Union, which participated entirely. The commitment period of the Kyoto Protocol started in 2008 and ended in 2012. Most countries have reached the targets that were set for this period. At COP18 in Doha in 2012 a second commitment period for the Kyoto Protocol was agreed upon from 2012 until 2020, known as the Doha Amendment. However, many countries, including the European Union and its 28 member states, stated that they would not follow-up on the targets formulated in the second commitment period of the Kyoto Protocol, since these targets were again focused on the so-called Annex-I countries, or most developed countries, just as in the first commitment period of the Kyoto Protocol. These Annex-I countries stated that other countries had developed quickly since 1997 and were polluting a lot more then themselves, but these newly developed countries were not part of the Kyoto Protocol. Therefore, many Annex-I countries decided to not commit to the Doha Amendment strictly.

### *4.2. Energy Agreement 2013*

In 2013, the Social Economic Board (SER) took the initiative with several parties active in the Dutch economy to draft a non-binding agreement for themselves. With this agreement, the involved actors wanted to take action against global warming and take their own responsibility regarding climate change and climate policy, which resulted in the Energy Agreement in 2013. Every actor was invited to join the negotiations and discussion, leading to a wide range of organisations having a seat at the table. The focus of the Energy Agreement was mainly on reducing the consumption of electricity, which would lead to a lower emission of greenhouse gases (SER, 2013). Taking into account the definitions of Torenvlied and Akkerman (2004) regarding ‘soft policies’ and ‘hard policies’, the Energy Agreement is a typical example of a soft policy.

*4.3. The Urgenda Climate Case 2012 - 2019*

Around the same time, the Urgenda Foundation started notifying the Dutch government of its concerns regarding the lack of action that was taken with regards to climate. In 2012, Urgenda sent a letter to the Dutch government stating the urgency of the climate issue and asking the State to take action. In return, the State answered that it recognises the climate issue and its high urgency, but that further action is not going to be taken, arguing that the Netherlands does not want to be the frontrunner in comparison to other countries. Urgenda found that the Netherlands was far from being the frontrunner, it was among the most emitting countries of the EU. Urgenda decided, together with hundreds of citizens, to law-suit the State.

In 2015, the Dutch court in The Hague ruled in favour of the Urgenda Foundation. The State was obliged to take action to achieve a reduction of greenhouse gas emission in the Netherlands of at least 25% by the end of 2020. However, the Dutch State did not agree with the ruling, and appealed against the verdict. This resulted in the verdict of the Court of Appeal of The Hague in 2018: the District Court ruling was kept in place. Where the District Court of The Hague argued that the State has a duty of care to protect and improve the living environment for citizens, the Court of Appeal added to the verdict that not taking action would be in violation with the European Convention on Human Rights ("Klimaatzaak Urgenda," 2019).

*4.4. Paris Climate Agreement 2015*

Another international treaty was agreed upon during the COP21: the Paris Climate Agreement. This agreement is seen as the successor of the Kyoto Protocol under the UNFCCC. The present countries at the COP21 in Paris agreed that new agreements and new targets should be drafted, resulting in the Paris Climate Agreement (2015). The Paris Climate Agreement was ratified by 195 countries. The Paris Climate Agreement entered into force in 2016, became effective in 2020 and set the goal to limit the warming of the earth by a maximum of 2 $^{o}$C and to pursue 1,5 $^{o}$C. Although the Paris Climate Agreement is binding, it is not legally enforceable, except indirectly via the European Union, which also committed as a whole to the Paris Agreement. The Paris Climate Agreement is based on the principle of Nationally determined contributions: all Parties must put forward their best efforts through nationally determined contributions and to strengthen these efforts in the years ahead, including the requirement to report on a regular basis on the emission and on the implementation efforts of Parties.

*4.5. Coalition agreement Rutte III 2017*

The Netherlands was among the top emitters of the EU in 2013 (Trouw, 2013). Even though the cabinet promised improvements, the Netherlands was still in the top 5 on the list of greenhouse gas emission per capita in the EU in 2016 (Starver, 2016)

After the elections for the second chamber of Parliament in the Netherlands, a coalition was formed with the political parties D66, ChristenUnie, CDA and VVD. These parties presented their coalition agreement in 2017. From this moment on, the shaping of climate policy seemed to receive a higher priority from the Dutch government. This became visible in the coalition agreement of the cabinet of Rutte III which was presented in 2017. With this coalition agreement, the cabinet Rutte III presented themselves as 'the greenest cabinet of all times' (Zuidervaart, 2017). The coalition agreement contained strategies to adhere to international climate agreements. The main point with regards to climate policy was the establishment of a national Climate Agreement, which will also be discussed in this section.

### *4.6. Climate Act 2015 - 2018*

The Climate Act that has been adopted in the Dutch parliament in 2018 embedded the international targets for the reduction of greenhouse gas emission in national law. The Climate Act was first presented in 2015 by the political parties GroenLinks and PvdA, however, the law was not supported by a majority of parliamentarians. Therefore, these parties started negotiation with other political parties, which resulted in the adoption of the law in 2018. This law states that the Dutch State needs to realise a reduction of greenhouse gas emission of at least 49% by 2030, relative to 1990.

### *4.7. Climate Agreement 2019*

As stated earlier, the coalition agreement of Rutte III in 2017 mentioned the realisation of a Climate Agreement. The Climate Agreement was meant to formulate measures that were going to be taken by all the actors that were involved, with the ultimate goal to reach the reduction of at least 49% less emission of greenhouse gases in 2030. This agreement adopted the Energy Agreement integrally, making it one of the chapters of the Climate Agreement. Moreover, a wide range of actors from various sectors were also included in the negotiations, making it a widely supported agreement with over 100 organisations that signed the agreement (*Klimaatakkoord*, 2019). For each sector, a so-called sectortable was established, at which the measures per sector were discussed and negotiated. For the electricity sector, this was the Electricity Sectortable (Klimaatakkoord.nl, n.d.). Just as the Energy Agreement, the Climate Agreement is considered as a form of soft policy.

# 5. Analysis

## *5.1. First issue: Urgenda Climate Case Trial*

In the Urgenda Climate Case trial, three actors that were essentially present are recognised for this analysis: the Urgenda Foundation that filed the law-suit, the Dutch court that took up the verdict and the State of the Netherlands that was the law-suited party. With the court being the only actor with decision-making power in this issue, the statement of the court is the policy that eventually is adopted. The court ruled in favour of the Urgenda Foundation, meaning that the government was obliged to reduce the emission of greenhouse gases by 2020 with 25% relevant to 1990.

The Urgenda Foundation law-suiting the State shows that the salience for the Urgenda Foundation must be extremely high, especially when taking into consideration that a non-governmental organisation together with hundreds of citizens law-suiting the State for climate policy, was called unique in the world. The high salience of Urgenda comes across in the analysis of multiple other issues in this analysis.

*Figure 1: policy space issue 1*


## *5.2. Second Issue: national greenhouse gas reduction policy*

This issue is mainly derived from the Energy Agreement of 2013. This issue puts climate policy on the national agenda for the first time. However, it can also be seen as an implementation of the international agenda onto the national agenda of the Netherlands.

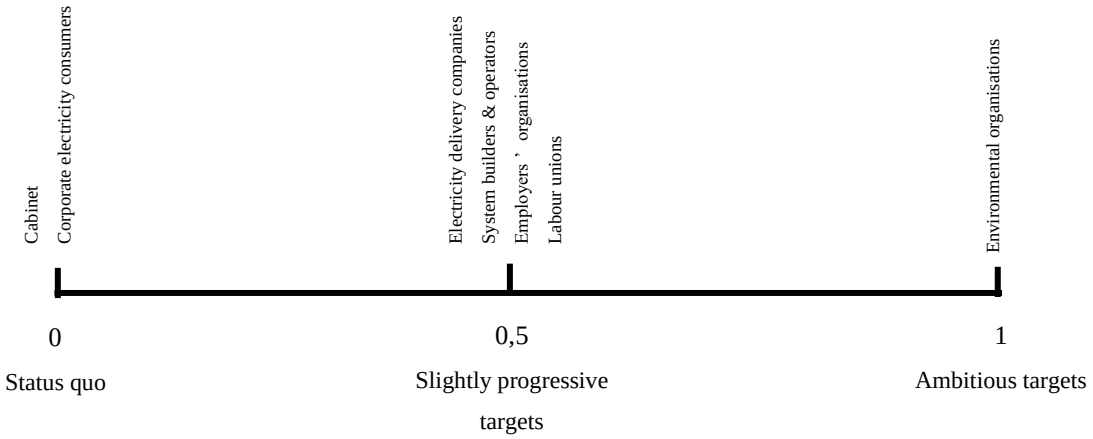
For this issue, several informal power resources define the bargaining power of the actors and eventually the policy outcome. Firstly, the cabinet has been present at the negotiations regarding the Energy Agreement. The bargaining power of the cabinet is high, since it has multiple power resources that can be used in the negotiations, such as setting regulations outside of the negotiations table. The cabinet can easily formulate a threatpoint, which would to a high extent influence the entire negotiation process. However, the cabinet did not attach a high degree of salience to these negotiations to formulate a collective agreement, therefore a threatpoint was not formulated nor realised. Secondly, the corporate electricity consumers also have multiple informal power resources that could be used in the negotiation process, and it is assumed that these informal power resources have been used due to the high degree of salience this actor attaches to its policy position. Corporate electricity consumers derive their bargaining power mainly from the large financial assets that are available. Moreover, these large companies are

often at the basis of industrial production chains, therefore influencing a large number of employees and companies in the Netherlands with the policy of the corporate electricity consumers. The high salience that these companies attach to this issue, is based on the price of electricity. When national policy regarding the reduction of the consumption of electricity is made, the corporate electricity consumers expect to pay a much higher price for the electricity, meaning lower company profits on a short term.

On the other end in the policy space visualised in Figure 2,**Error! Reference source not found.** the environmental organisations can be found. Especially the environmental organisations have been very powerful in the negotiations regarding national policy for reducing the emission of greenhouse gases in the Netherlands, which is expressed in a high degree of salience and bargaining power. These environmental organisations receive their bargaining power from the financial resources that they receive from the public in the form of donations. Besides that, they receive a lot of support from the public debate that has been going on at the same time. The general idea that something needs to happen with regards to the fight against global warming strongly backs-up the arguments of the environmental organisations and the bargaining power they receive. Many environmental organisations receive their reasons for existence from the fight against global warming, which makes it logical to strive for ambitious targets regarding the reduction of greenhouse gas emission and the salience attached to that position.

The electricity delivery companies, the system builders & operators, the employers' organisations and the labour unions are placed in the middle of the policy space, meaning that their policy position is to set slightly ambitious targets for this issue. In the interviews with the expert informants, it became clear that these organisations have not been too powerful in the bargaining process, but that most of the power and influence was executed by the corporate electricity consumers and the environmental organisations. However, the actors in the middle of the policy space mostly saw economic opportunities for their own business or for the people they represented. Moreover, in the interviews it was generally assumed that the companies in the middle of the policy space expect it to be bad for their reputation when they would hold on to the status quo instead of being progressive in pursuing a lower degree of emission in their sector. The actors in the middle are influenced by the public debate, which is to reduce the level of greenhouse gas emission. However, these actors would both operate well when the status quo would be maintained or when slightly progressive targets would be agreed upon. Therefore, these actors attach a lower salience to this issue than the environmental organisations and the corporate electricity consumers.

*Figure 2*




This issue is analysed using the compromise model that is explained in this report in an earlier section. The policy preference, salience and bargaining power are used in predicting the outcome, or for this study, to reconstruct the decision-making process. These elements have been presented earlier in Table 1. The equation that belongs to the compromise model as presented earlier in the theory section (Equation 1) of this report is recapped in this section as follows:

$$outcome = \frac{\sum_i^n power_i salience_i preference_i}{\sum_i^n power_i salience_i}$$

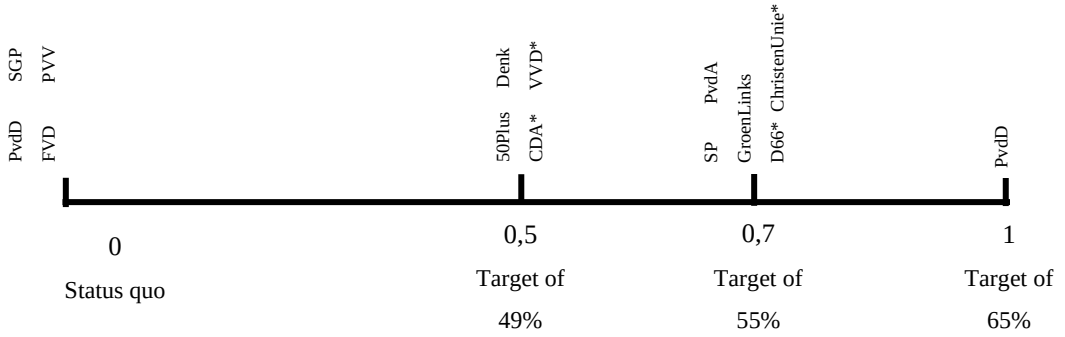
When filling in the elements of the model by using Table 2, the outcome should be ≈ 0,53. This is close to the policy position of 0,5, which equals the policy alternative to set slightly progressive targets. In reality, this is also the realised outcome in the Energy Agreement. Combining the presented analysis regarding the informal power resources and the saliences of the actors with this outcome, it becomes clear that the position of the multiple actors in the middle of the policy space collectively have had enough resources to achieve this moderate policy outcome away from the status quo. Moreover, it visualises that the two most powerful actors that also attached a high degree of salience to this issue have not succeeded in pulling the policy outcome into their direction. In this issue, the cabinet did not attach a high degree of salience to this issue. However, with the number of actors that were present in the negotiations for this issue, the cabinet could not have made a difference if the preference, salience and power of other actors remained the same: if the cabinet attached a salience of 1 to the policy position of 1: ambitious targets, the outcome would be 0,66. Nevertheless, it is unclear if other actors would also follow the position of the cabinet towards the more ambitious targets when the cabinet would have had a different preference and thereby changing the outcome of this decision-making process.

### *5.3. Third issue: regulate the reduction of greenhouse gas emission by law*

This issue is mostly derived from the policy that has been realised in practice, the Climate Act of 2018. Presenting this law in parliament was the ultimate agenda-setting and formalisation of Dutch climate

action, since the targets would not depend on only one cabinet. This law made sure that it would not be up to the cabinet which targets would be achieved and which would not be achieved, because not pursuing these targets would be illegal. However, political parties in parliament had their own views regarding these targets, visualised in Figure 3.

*Figure 3*




**parties in coalition Rutte III*

After the first presentation in 2015 by GroenLinks and PvdA, several parties supported the initiative for the Climate Act. These supporting parties included SP, D66 and ChristenUnie. These parties wanted to regulate by law that a minimum reduction target of 55% would be pursued by 2030, however, these parties could not form a majority in parliament. Therefore, compromises had to be made in order to pass the Climate Act through the second chamber of the parliament.

Before it came to a vote again in parliament, the coalition agreement of Rutte III was presented in 2017. In this coalition agreement, it was mentioned that a reduction target of a minimum of 49% would be pursued. However, the expert informants stated that a division existed among the coalition parties. Whereas ChristenUnie and D66 had progressive views of how to deal with climate policy, VVD and CDA worried less on this issue. Even though the VVD and CDA together have a majority of the seats of the coalition (VVD: 33 seats; CDA: 19 seats; D66: 19 seats; ChristenUnie: 5 seats), it is assumed that the climate targets made it to the coalition agreement due to the low salience of VVD and CDA and the high salience attached to this issue by ChristenUnie and D66, as presented in Table 3.

This law has been presented in the second chamber of the Dutch parliament again in 2018, after negotiation and compromising. It is assumed that, just as for issue 2, the saliences and voting power have influenced the compromising and bargaining stage. Therefore, the compromise model can be used again. The values that were constructed and presented in Table 2 are used again, which gives the outcome of $\approx 0{,}55$. The closest alternative to this value is 0,5: setting a target of 49% by law. This is also the outcome that has been realised in practice. However, this analysis takes into account that all parties in parliament have been involved into making a compromise and pass this Climate Act through parliament.

Although the initiators of the Climate Act have been looking for not just a simple majority in the parliament but a broader support of parliamentarians, it is unlikely that the bargaining happened with every single party in the parliament (Het Financieele Dagblad, 2018) A different approach might work to reconstruct the decision-making for this issue. Taking the approach of the median-voter theorem and taking into the account the different voting powers of each political party, the outcome is exactly 0,5, meaning that the model predicts an outcome of setting the target of 49%, which is what happened in reality.

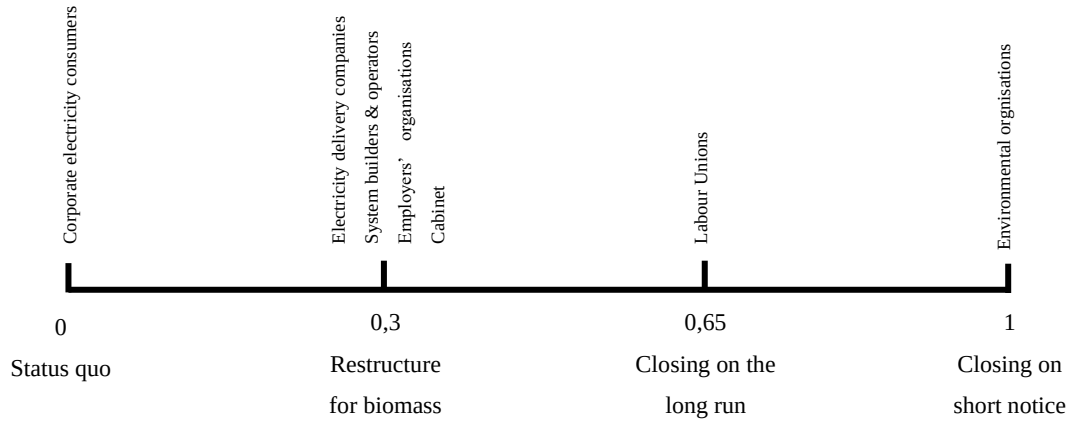
*5.4. Fourth Issue: Closing of coal power plants*

It is important to notice that this issue is primarily focused on the decisions that are made until 2019. Until that year, the State had not yet accepted the court-ruling in the Urgenda Climate Case and when the State was not certain about the measurements it would take to reach international climate goals in 2030 and 2050.

The issue has been a widely discussed topic at different levels of decision-making and at the public debate. To correctly analyse the decision-making process, this issue needs to be analysed in two different ways for two different levels. As was also the case for issue two, a negotiation model needs to be used for the actors at the sectortable, and the median voter theorem is used for the simple majority voting that happens in the Dutch parliament.

The negotiation process for this issue takes place in the same environment as in issue two: among various actors involved in implementing climate policy in the Netherlands in different ways. For this issue, it is important to notice that in practice this is the sectortable Electricity of the Climate Agreement. At this sectortable, the measures that need to be taken to reach the agreed 49% reduction of greenhouse gas emission by 2020 are discussed, of which the closing of coal power plants is one of the issues. The policy space regarding this issue and the sectortable Electricity is presented in Figure 4.

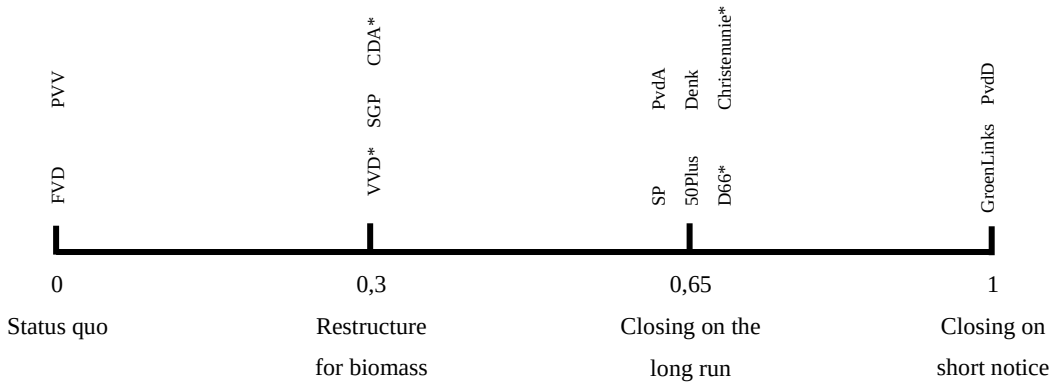
*Figure 4: policy space issue 4 - sectortable electricity*



The decision-making process of this issue can also be analysed using the compromise model. Again, Equation 1 is applied to the data presented in Table 4 for the compromise model. The equation provides a prediction for the outcome of ≈ 0,49. This would mean that the outcome is between the two policy alternatives of restructuring coal power plants for the use of biomass and closing the coal power plants on the long run. A new round of bargaining and negotiation is started after this outcome, which resulted in a compromise that combines the two policy alternatives: on a short notice, coal power plants will be restructured for a part to ensure the electricity supply is sufficient for the country, and the power plants will be closed eventually, at least before the year 2030, when the 49% reduction needs to be realised.

The decision has also been brought to the political decision-making stage. This happens in the Dutch parliament, where political parties expressed their preference for this issue. Again, just as for issue three, the median-voter theorem is used to analyse the decision-making regarding the closing of coal power plants. Taking into account the voting power of each political party, the outcome would be to close the coal power plants on the long run.

*Figure 5: Policy space issue 4. Political realm*

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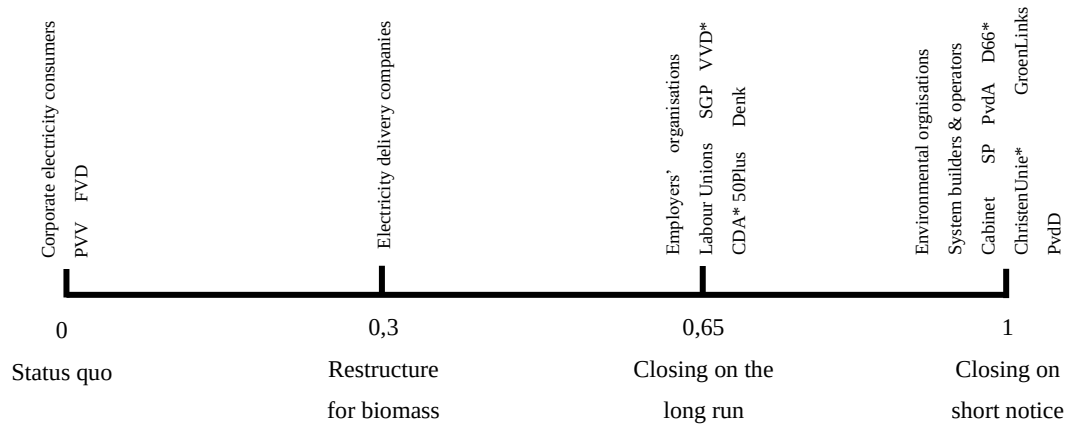
The outcomes of both analyses are similar to the policy outcomes in practice. However, this analysis is based on the situation before the final verdict in the Urgenda Climate Case in 2019. Due to this verdict, hence the obligation of the State to take more action to reduce the emission of greenhouse gases, the cabinet has attached a higher salience to this issue. Moreover, several actors have changed their policy position regarding this issue, since new information regarding the use of biomass became available and the urgency of a higher cut of the emission by 2020 was higher. The cabinet decided to already close a number of coal power plants immediately, and other coal power plants are closed on a shorter notice. The combined policy space after the Urgenda Climate Case verdict of 2019 is as presented in Figure 6.

*Figure 6: combined policy space of actors at the sectortable electricity and the political realm after court verdict in Urgenda Climate Case*

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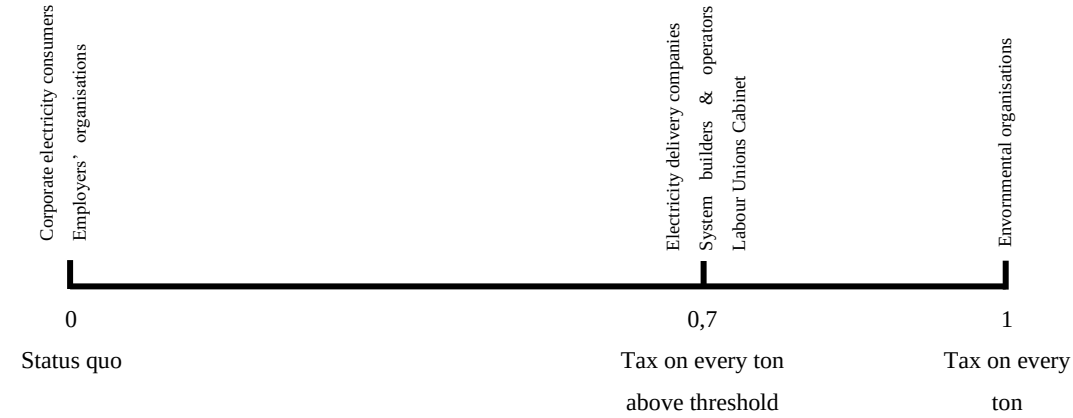
### *5.5. Fifth issue: Taxing the emission of $CO_2$*

At the time of the Climate Agreement, the Climate Act was already agreed upon and the Paris Climate Agreement was already signed and effective. Moreover, in 2018, the Dutch Court of Appeal also denied the appeal of the State in the Urgenda Climate Case. Altogether, this made that the urgency for implementing measures for cutting the emission of greenhouse gases was higher than before. Even though not a lot of action was taken by the cabinet after this second court verdict, several actors present in the policy space expressed more progressive alternatives in the overall project of reducing the emission of greenhouse gases, expecting stricter measures on a short term. Figure 7 represents the policy space with the actors involved. Moreover, the saliences and bargaining power of the actors are presented in Table 5.

*Figure 7: policy space issue 5*

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The negotiation and bargaining setting of this issue is similar to the setting under the Energy Agreement of 2013, analysed in issue two. Nonetheless, the negotiation did not just take place at the Electricity sectortable of the Climate Agreement, it was a more general debate covering many different sectors.

However, the negotiations for the electricity sector ended up with the first concrete agreement in the Climate Agreement of 2018, while the agreements for the other sectors are not yet finished. Since the scope of this study is on the electricity sector, the analyses is limited to only this sector.

The same as four issue two and four, the compromise model is used for this issue, since it concerns cooperative and informal decision-making, at which the actors do not have formal voting power. The actors that are involved only have their informal power resources that they can use to influence other actors. The equation for the predicted outcome under the compromise model is repeated here. This equation has been covered elaborately in the theory section of this report.

$$outcome = \frac{\sum_i^n power_i salience_i preference_i}{\sum_i^n power_i salience_i}$$

Using the preferences of the policy outcome, saliences and the power of the actors, the model predicts that the outcome should be ≈ 0,57. This outcome is closest to the policy alternative to tax every ton of $CO_2$, but a distance between the outcome and the policy alternative, that received the position of 0,7 in this analysis, still exists. However, the cabinet decided upon this alternative in practice. The deviation in the outcome of this model and the actual outcome can be explained by the way in which the actual policy was presented and adopted in practice. Although a $CO_2$ tax with a tax-free threshold is going to be used from the year 2021, this policy is not very far-going. The tax-free threshold is high, meaning that companies do not have to pay the taxes until that threshold has been reached. Moreover, this policy takes the European Union Emissions Trading System (ETS, 2005) into account, meaning that the ETS is the leading policy, and that emitters start to pay the national $CO_2$ only after the limit of the ETS has been reached. The ETS has proven to be less effective than expected. Without the Dutch policy solving the ineffectiveness, this policy is seen more as a symbolic feature than an effective feature in the fight against the reduction of greenhouse gas emission (Blotenburg, 2019; Joustra, 2019). This explains the gap between the outcome of this analysis and the realised policy: the policy was created, but in a weaker sense.

### *5.6. Implementation of international climate goals*

The reduction targets for the greenhouse gas emission of the Netherlands are mainly focused on realising a reduction of 49% in 2030, relative to the level of 1990. To reach these targets, action already had to be taken as early as possible. In 2012, at the start of the Urgenda Climate Case, a 25% reduction by the end 2020 was deemed as necessary to be in line with these goals for 2030. However, it has become difficult to reach this target by the end of 2020. The Dutch PBL Netherlands Assessment Agency calculated that only a 21% reduction would be realised (PBL, 2019). To answer the question of why the Dutch government has not taken action earlier regarding climate policy, elements of policy implementation models are used.

The issues that were analysed before, show that the most important reason for the outcome of negotiation, or when speaking in terms of the actors as implementers: the policy performance of each issue is the policy position, the salience and the power of each actor. At every issue, these three elements are crucial for the performance. However, for issue two, the creation of national policy for reducing the emission of greenhouse gases, the actors receive full discretion on the outcome of the collective decision-making. The cabinet does not attach high salience to this issue and does not take any control, hence the other actors are free to strive for their own policy position as the performance as assumed by the implementers' preference model.

In the same year, 2015, that the court ruled in favour of the Urgenda Foundation in the Urgenda Climate Case for the first time, the Paris Agreement was also agreed upon. The Climate Act was also presented for the first time in 2015, but it received too few support. However, in the coalition agreement of Rutte III, the coalition parties seemed to attach a higher salience to this issue. In 2018, the Climate Act is adopted, although the targets are lower than the presented initiative bill of 2015. Still, it receives a lot of critique for being more symbolic than effective.

The fourth issue regarding the coal power plants shows that many actors present at the electricity sectortable remain using their power to keep climate action at a smaller pace. The cabinet seems to join these actors often, even though political parties in parliament have a more progressive view on this issue. After the appeal in the court-ruling in the Urgenda Climate Case was denied and the verdict kept in place, several actors seemed to take a different policy position towards a slightly more ambitious implementation of climate targets.

The fifth issue shows that several actors are already at moderately progressive positions to reach the climate goals. However, again, the decision that was made on this issue was influenced by the different actors, which weakened the execution of this issue.

# 6. Conclusion

*How can it be explained, using models of collective decision-making and policy implementation, why the Dutch government in the period between 2012 and 2020 did not take enough action in the electricity sector of the Netherlands to be compliant with international climate goals?*

It is clear that the actors, mainly private companies, received an enormous degree of discretion to implement the climate goals. These actors had multiple reasons for deviating from the political decision, the climate goals, which are presumed to be mainly economic reasons. However, the issue regarding the Energy Agreement of 2013 shows that these actors were willing to make an effort for reducing the emission of greenhouse gases in the Netherlands. It seemed that international climate policies and a short while later also the national climate policies, advanced quicker than these actors at the negotiation table preferred.

Whereas the cabinet could have taken more control in taking measures for meeting the international and later the national climate goals, it let the actors at the negotiation tables take the decisions. This led to only slightly moderate movements towards policy to reduce the emission of greenhouse gases.

The first hypothesis of this research was formulated as *implementation failed because it was a continuation of bargaining without a proper decision that was put under political control.* It can be concluded that this hypothesis has been confirmed. Political control was not taken with regards to climate policy, instead the actors that are involved remained bargaining first at the table for the Energy Agreement, and later at the sectortable Electricity under the Climate Agreement. Although the cabinet was present at both these tables, no political control was taken. The Climate Act of 2018 could be seen as an attempt to take political control, however, this law again gives full discretion to the sectortables of the Climate Agreement to take measures for reaching the targets. With that, the second hypothesis '*implementation failed because the initial decision granted too much discretion to important implementing organisations'* can also be confirmed. The initial decisions are the international agreements, that gave too much discretion to the member states, without the possibility to monitor, control or correct countries that did not meet the targets set in the treaties. Moreover, on a national level, the cabinet granted practically the same amount of discretion to the actors that were meant to implement these targets on a national level.

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