THE FEMALE INFLUENCE ON ENVIRONMENTAL GOAL SETTING

MASTER THESIS

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Dear reader,

This thesis signifies the cherry on top of my master studies at the University of Twente. The title 'The Female Influence on Environmental Goal Setting' captures two of my many interests in the field of public administration: environmental policy and the social issue of feminism. This study has been a great way to explore in these two fields and more importantly, to learn about and engage in academic research. The research and especially writing process has been a challenge, which I could not have done without the support of those around me.

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Janiek Doornbos
Zwolle
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ABSTRACT

Objective: This thesis aims to investigate the female influence on environmental goal setting. It does so, in exploring the relationship between the political participation of women in local council coalitions in the Netherlands and the level of goal setting in local council coalition agreements in the legislative period of 2018-2022. It was hypothesized that a higher political participation of women in a local council coalition leads to a higher level of goal setting of environmental goals.

Methodology: The hypothesis was tested by testing the correlation between the political participation of women in a local council coalition and the level of goal setting of environmental goals in the local council coalition agreement. 50 local council coalitions were included in the sample. The political participation of women was calculated by counting the number of women in a local council coalition and expressing this in a percentage relative to the total amount of seats in a local council coalition. The level of goal setting was calculated by comparing environmental goals of each local council coalition to the goals set by the national government and granting points accordingly. Three quantitative environmental goals were included in the study: the reduction of CO2-emissions, disconnection from gas and climate neutrality. A local council coalition agreement was granted more points if a goal was higher than that of the national government in terms of it having a higher goal percentage or having an earlier deadline in time.

Conclusions: No correlation was found between the political participation of women and the level of goal setting in local council coalitions. The sample was stratified to reduce possible effects of the political composition of a local council coalition on their level of goal setting. Due to this, the sample size was reduced from a possible selection of 356 municipalities to 50 municipalities. The smaller sample size could have had an effect on the correlation results. Another reason why no correlation was found could be that only small differences in level of goal setting were observed between local council coalitions. It could be that municipalities perceive the national goals as a given and thus do not diverge much from it. Additionally, the reduction of CO2-emissions and climate neutrality are difficult to measure and regulate on a municipal level which makes them less suitable as goals to aim for as a municipality. Most local council coalition agreements did express environmental concern and described how the

municipality would tackle some environmental issues. However, most of these goals were inexplicit and unquantifiable and related to municipal specific policies.

Implications: This study serves as a starting point in the research about the female influence on environmental goal setting at a local level of government. Further studies might benefit from a more qualitative approach by including a more diverse range of environmental goals, not just quantitative ones. Furthermore, further research needs to investigate possible causes of the lack of a relationship between the political participation of women and the level of goal setting of environmental goals. A study like this would be more focused on the decision-making process itself and the role of women and femininity in this rather than the outcome of this process. Studies like these will help in generating a more robust foundation of knowledge about environmental goal setting in a local setting and the role of gender and gender socialization.

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1 INTRODUCTION

The central theme of this study is the female influence on environmental goal setting. Gender equality and women empowerment is one of the 17 Sustainable Development Goals (UN, 2019). In the Netherlands there is still much to be gained. For example, in local councils there is a higher percentage of male counselors than female ones. In 2018, 31.7 percent of local counselors were women (Bouwmans, 2018). While it is in itself important to strive for gender equality, it might also be favorable for the environment. Non-profit organization Truthout published an article in which is explained why we need more women creating environmental policy. They argue that, according to several studies, female economists are more likely to support environmental policies than their male counterparts, women strive more for environmental protection, women are more environmentally concerned than men and they have a smaller carbon footprint (van Hilten, 2018). Though it is theorized that the participation of women in politics is advantageous for environmental policy, this relationship is not backed by sufficient research, especially not at a local level in the Netherlands. This research attempts to either establish or refute this relationship by studying it. Women might be more environmentally conscious, but does this also show in their role as a political representative? Thus, this research aims to establish if there is indeed a relation between the political participation of women and the development of more ambitious environmental goals. The focus of this study is on local governments in the Netherlands, i.e. municipalities. As local council coalitions (in collaboration with the local council) are in charge of developing local policies which includes environmental aims, they are the units of analysis in this study. The units of observation are the local council coalition agreements in which (environmental) goals are expressed at the start of the legislative period of a local council coalition.

1.1 RESEARCH QUESTIONS

To what extent does the political participation of women in local council coalitions in the Netherlands have a positive influence on the level of goal setting of environmental goals in local council coalition agreements of the legislative period of 2018-2022?

> What is the degree of political participation of women in local council coalitions in the Netherlands after the 2018 elections?

- What is the level of goal setting of environmental goals which have been defined by local council coalitions in local council coalition agreements of the legislative period of 2018-2022?
- To what extent is the political participation of women causally related to the level of goal setting in environmental goals?

1.2 SCIENTIFIC AND SOCIAL RELEVANCE

In a time where it is vital to develop sustainable environmental policies, researching whether the participation of women in local government positively influences the level of goal setting of environmental goals, is fruitful. This could not only help to advance environmental protection, but also gender equality and the empowerment of women in general. Furthermore, currently existing research leaves room for more exploration on the topic of this thesis, as is further elaborated upon in the literature review in the next chapter. Little attention has been given to women's actual influence on environmental policy or goal setting, once they are active in the political area. Research is mostly limited to observations in the private sphere; for example, how and why women behave more environmentally friendly than men. This research adds to the topic by studying the relationship between environmental goal setting and the political participation of women on a local level.

1.3 OUTLINE

The next chapter concerns the theory of this study. Currently existing literature is explored, and the conceptual framework and hypotheses are presented. Following in Chapter 3 is the methodology of the study. Subsequently, the results are presented in Chapter 4. Next, the conclusion in Chapter 5 provides a short overview of the results. A discussion of the results follows in Chapter 6. Lastly, Chapter 7 provides the list of references used, followed by Appendices A and B.

2 THEORY

The theory behind the study is explored by first reviewing the existing literature on the topic. Next, a theoretical framework which summarizes the findings of the literature review is offered from which the conceptual model of this study is derived. Lastly, the hypotheses which are tested in this study are presented.

2.1 LITERATURE REVIEW

In the study field of business administration, the influence of gender on the level of engagement with green issues has been studied by Braun (2010). Braun (2010) confirms the notion that prior research has shown us that women express higher levels of concern toward the environment than men. Hence, the reason why it is interesting to research whether this theory holds in policy outcomes in policy processes. According to the study conducted by Braun (2010), women indeed are more engaged in environmental issues than men. However, attitude alone does not lead to a change in behavior. This research is relevant, as it indicates that higher engagement does not necessarily influence decision-making. This might be a reason why, although women tend to be more environmentally focused, political participation of women does not lead to more ambitious environmental policies in the end.

McKinney (2014) offers a structural equation model of each nation's relative contributions to over usage of the global carrying capacity. Consequently, the author tests theorizations in environmental sociology, among which are theories about women and their relation to the environment. Like Braun (2010), McKinney (2014) also underlines the idea that the relation to the environment differs in women and men. It is theorized that this originates from cultural contexts which position women as caregivers, among other things. Women are socialized to be family nurturers which is suggested as a reason why women would have a more protective attitude toward nature and the environment than men (Mohai, 1992). Several studies have demonstrated this relationship between gender and nature; women have shown significantly more concern about environmental issues than men (Blocker & Eckberg, 1989; Brody, 1984; George & Southwell, 1986; Hamilton, 1985a, 1985b; Nelkins, 1981; Passino & Lounsbury, 1976; Solomon, Tomaskovic-Devey, & Risman, 1989 1989). In a study by Hamilton (Hamilton, 1985a), it is shown that women with children in particular were more concerned about the environment, in this case toxic water contamination of the local water supplies, than women without children *and* men.

In a research which seeks to understand gender differences in environmentalism Dietz, Kalof, and Stern (2002) found that women value altruism more than men. Therefore, they argue that gender differences in environmental studies can (partly) be attributed to the underlying value of altruism, which differs per person due to the way someone is socialized. In a cross-national study by Dzialo (2017) it is demonstrated that women engage more frequently in pro-environmental behavior than men. It is interesting to study whether this also translates into someone's working life, especially when it is one's job to cater to the public interest, such as being a counselor in a local council coalition.

However, a higher level of concern does not indefinitely translate to activism, as shown in a study by Tindall, Davies, and Mauboulès (2003). They demonstrate that although women are more concerned about the environment than men, they do not engage in activism more. They theorize that this is due to a lack of resources. Another scholar which, like Tindall et al. (2003) found that higher engagement or concern does not lead to a change in behavior in the field of entrepreneurship is Braun (2010). Braun (2010), points out that although female entrepreneurs do have a higher engagement in environmental issues it does not necessarily lead to more green choices. An earlier study by Mohai (1992) also shows that although women show greater concern for the environment than men, their rates for activism were lower than the male rate for activism. Other research also demonstrates that in spite of women's higher level of concern for the environment, they are less politically active on these issues (McStay & Dunlap, 1983; Mitchell, 1979).

In different studies it appears that although women are more concerned about the environment than men, it does not translate into activism. Tindall et al. (2003) suggest that this is due to their lack of resources and heavier domestic responsibilities. This phenomenon is also called biographical availability, as mentioned by McAdam (1986).Women's suggested limited biographical availability makes it interesting to study whether a higher number of political participation of women in local government also leads to a higher level of goal setting in environmental goals. Since these women have apparently overcome the barrier of biographical availability to engage in a form of activism. This could then lead to more environmentally friendly choices in the political arena they operate in.

Though multiple studies have shown that there is indeed a relationship between gender and environmental concern, some studies also highlight the fact that it is not gender which

generates the difference in concern about the environment, instead they identify gender socialization as a mediating factor (Strapko, Hempel, MacIlroy, & Smith, 2016). An earlier study by Zelezny, Chua, and Aldrich (2000) also supports that gender socialization explains the gender differences in environmentalism. Though insightful, it is also fruitful to reflect upon whether it matters if either gender or gender socialization is the cause of deviating environmental attitudes. In a decision- and policy-making context, it is nevertheless relevant to have insight in how these mechanisms work.

Mobley and Kilbourne (2013) found two other variables which mediate the gender effect in environmental intentions: technological views and self-enhancement values. They argue that the gender effect differs depending on one's endorsement of these two value orientations. Consequently, they draw the conclusion that it is the underlying value constructs which shape an individuals' intentions and concerns, not so much someone's gender.

Other than the suggested female influence on environmental goal setting, many other factors play a role in establishing a local council coalition agreement at a local level. Hoff and Strobel (2013) investigated explanations for the existing variation in ambition of climate change policies in Danish municipalities. The authors applied two strategies for this: one explores the importance of structural factors, the other actor-level factors. Hoff and Strobel (2013) found, regarding structural factors, that the size of a municipality and the presence of a leading civil servant or a certain organizational unit responsible for climate change matter. The presence of the latter increases the ambition for climate change action plans. Also, big municipalities are more ambitious than small municipalities. The political affiliation of the Mayor does not seem to matter. In regard to actor-level factors, the most important actors in local climate change politics are not so much the politicians, but the climate change personnel. They are inspired by green organizations or projects and the climate networks which many municipalities have joined. Hoppe and Coenen (2011) investigated factors which influence local sustainability performance. They demonstrate that municipality size and network membership positively correlate with local sustainability performance. The authors also showed that differences exist in local sustainability performance between regional governments, i.e. provinces. In a case study in the Netherlands, Van den Berg and Coenen (2012), studied factors which influence the integration of climate change adaption in local policies. Size proved most important: being a larger, i.e. urban, municipality advanced

horizontal policy (and thus environmental policy) integration in contrast to being a smaller, i.e. rural, municipality.

2.2 CONCEPTUAL FRAMEWORK

In Figure 2.1 the relationship between the independent and dependent variable which are studied in this research is shown.

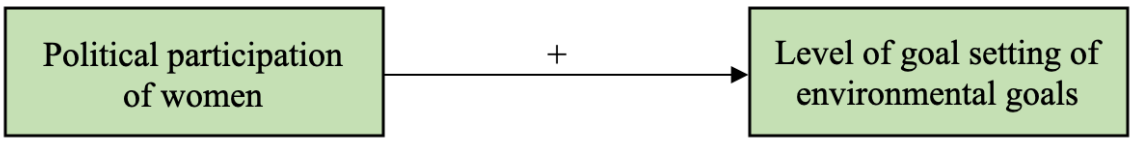

Figure 2.1 Proposed relationship

As appears from the literature review, the theoretical framework is much broader. All possible variables which relate to the concepts according to the researched theory are shown in Figure 2.2. Again, the suggested relationship between cause and effect are shown in this model, this time with a dashed line as to indicate the possible spuriousness of the relationship due to the presence of third variables. The variable 'motherhood' is a moderator which amplifies the effect of x on y. Altruism, technological views and self-enhancement are intervening variables in the relationship between x and y, possibly (partly) explaining the relationship between x and y. Feminine socialization is a possible confounding variable which could explain both the cause and effect; when the level of feminine socialization is high in a person, their political participation will be low; a high level of feminine socialization will however increase the level of goal setting of environmental goals, regardless of the fact whether this person is male or female. Though the moderating effect of political affiliation of a counselor on the level of goal setting in environmental goals seems limited according to theory, it is highly likely that the *political composition* of a local council coalition has influence on the level of goal setting in environmental goals, which is why it was added to the model. The ideologies which exist in a mixed-party local council coalition are likely to influence the environmental policies. More progressive and left-wing parties tend to be more ambitious when it comes to environmental goals, whereas more conservative and right-wing parties tend to be less ambitious.

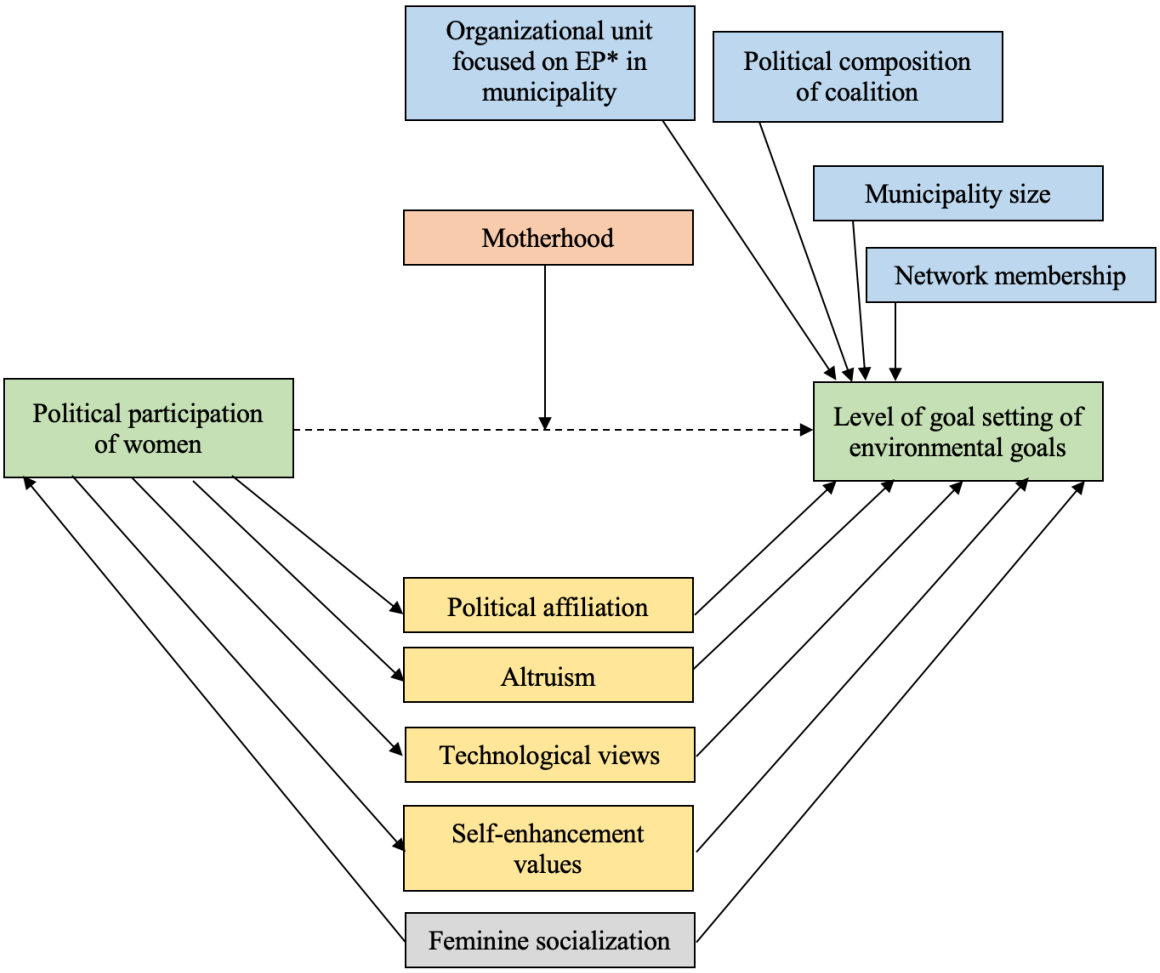

Figure 2.2 Theoretical framework
** Environmental Policy*

For the scope of this research, the variables 'political composition' and 'municipality size' are used as control variables to investigate the relationship the political participation of women and the level of goal setting of environmental goals. Both of these variables can be measured and quantified easily, which makes them suitable for this study. Hence, the model as shown in Figure 2.3 contains the relationship which is examined in this research. The straight line suggests the relationship between the x and y variable, the dashed lines show the relationship of the control variables within the model. To include a measure of the size of a municipality in terms of both its numbers of inhabitants as well as its degree of urbanization, the variable of 'municipality size' was changed to 'municipality scale'. The reason why both these measures are included, is because the number of inhabitants tells something about the organizational capacity of a municipality. A municipality with more inhabitants generally has a bigger organizational capacity which can affect the level of goal setting. Of course, municipalities are organized in different ways. Municipalities with a similar level of

inhabitants and thus organizational capacity can have a different organizational structure which provides more attention to a certain policy area than the other. This data is more difficult to gather, which is why a more general measure of municipality size is chosen. The degree of urbanization tells us whether a municipality is more rural or urban. This can affect environmental goals, as an urbanized municipality demands different environmental measures than a rural municipality. More on the operationalization of this variable follows in Paragraph 3.2.

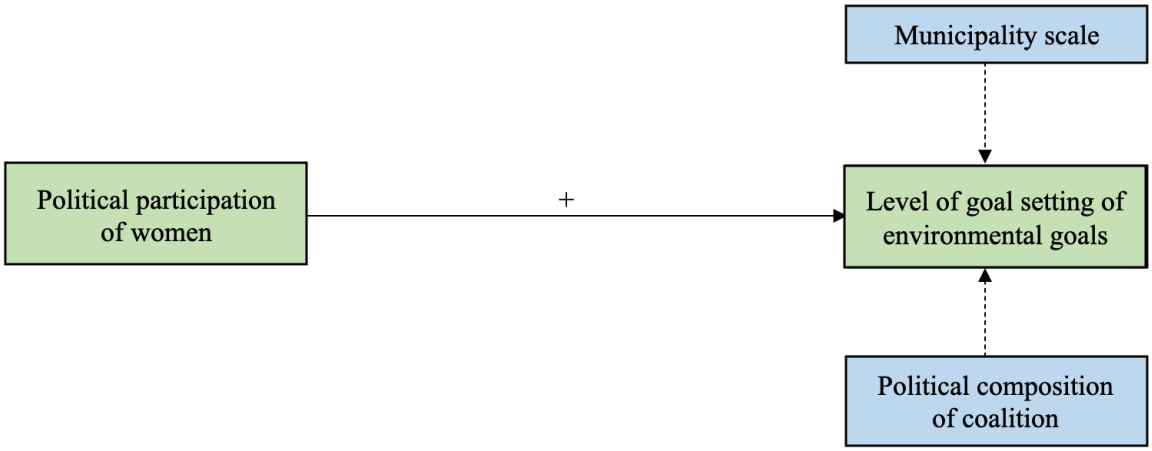

Figure 2.3 Conceptual framework

2.3 HYPOTHESES

One hypothesis can be derived from the research question:

- *Hypothesis 1: A higher political participation of women in a local council coalition leads to a higher level of goal setting of environmental goals.*

Two additional hypotheses are tested:

- *Hypothesis 2: There is a correlation between the political composition of a local council coalition and the level of goal setting of environmental goals.*
- *Hypothesis 3: There is a correlation between the scale of a municipality and the level of goal setting of environmental goals.*

In the next chapter the methodology of the study is explained.

3 METHODOLOGY

The methodology of this study is explained by first shortly introducing the strategy and design of the study. Next, the conceptualization and operationalization of variables is discussed, including the way in which the data was collected. After that, the sample and the way in which it was selected is set out. Subsequently, the method of data analysis is discussed. Lastly, some remarks are made regarding the reliability and validity of the study.

3.1 STRATEGY AND DESIGN

The general research question aims to investigate the effect that the political participation of women has on the level of goal setting in environmental goals and is therefore explanatory. The first two sub-questions are descriptive and the third one is correlational. As this research focused on the local level of government, local council coalitions were the units of analysis in this research, as they are the ones formulating (environmental) goals for the upcoming legislative period. These goals are formulated in local council coalition agreements, making these the units of observations in this research. The setting of the research was in the Netherlands, after the 2018 municipal elections. The research question was answered with a cross-sectional design; data from a population at a specific point in time was studied. A limitation of this type of research design is that it might be more difficult to establish causation as the data offers insight in a single moment in time, whatever happens before or after this moment is not taken into account.

3.2 CONCEPTUALIZATION, OPERATIONALIZATION AND DATA COLLECTION

Local council coalition(s)

This refers to the coalition which is formed in a municipality in the Netherlands after elections. Elections decide how the seats in a local council will be divided, in case there is not a one-party majority. Subsequently, a majority coalition will be formed.

Local council coalition agreement

The local council coalition is responsible for drawing up a local council coalition agreement for the upcoming legislative period of four years. In this agreement, a coalition expresses their

plans, ambitions and specific goals for the following four years. Municipalities use different names for their coalition agreement such as: coalition accord, council program, administrative agreement, outline agreement, vision, coalition program and island agreement.

Political participation of women

In this study a specific type of political participation of women was investigated. The variable refers to the number of women in a local council coalition in the Netherlands. As the local council coalition is in charge of drawing up a local council coalition agreement, the people within this coalition engage in discussion about which goals to include. They consult external parties and the local council, but ultimately the people which are part of the local council coalition decide on the contents of the local council coalition agreement. This means that this variable entails the (political) participation of women within this process of deciding which goals are included in a local council coalition agreement. The variable was measured by counting the number of seats held by women in a local council coalition and then expressing this number in a percentage of the total amount of seats in the coalition, which equals the seats of both men and women in a coalition. Using a tool published by de Volkskrant, the number of seats of each local council coalition per party was retrieved ("Welk college heeft uw gemeente nu? [Which council does your municipality have now?]," 2018). Specific data about the percentage of women in each local council coalition was collected from the websites of municipalities. Each municipality publishes the composition of their council on their website. This way, the percentage of women in each local council *coalition* was calculated by counting the number of women in a coalition per party. A list of URLs of the websites and the date of retrieval of the data is included in Appendix A.

Environmental goals

Environmental goals are goals which a local council coalition strives to accomplish relating to the environment. Three types of environmental goals were assessed in this study, namely:

- **Goal 1:** In year X CO2-emissions must be reduced with Y% (relative to 1990 levels).
- **Goal 2:** Disconnect Y% of houses from gas in year X.
- **Goal 3:** In year X municipality Z must be climate neutral.

These goals were chosen because they are specific and can be easily measured as they are expressed in quantities, years and direction of a goal. This makes comparing the goals of

several local council coalitions easier, which prevents mistakes in interpretation of goals. Because the goal of the study is to measure a correlation between the political participation and the level of goal setting of environmental goals it was needed to come up with a quantitative measure of environmental goals in order to conduct statistical tests. Hence, aforementioned types of environmental goals were chosen.

Level of goal setting

This refers to the degree in which environmental goals as expressed in a local council coalition agreement are lower or higher than the goals set by the national government. A goal of a local council coalition can be lower or higher in a sense that the deadline in time is later or earlier than that of the national government or the reduction target is lower or higher when compared to the national government. The variable was measured by using a scale which attributes points to the same (or similar) environmental goals in a local council coalition agreement as that of the national government. Goals in these agreements which relate to the environment were assessed by using the following evaluation criteria, which grants each environmental goal a score from 1 to 5:

1 = No goal is expressed
2 = Unspecific goal is expressed (no mention of year or percentage)
3 = Specific goal is expressed; lower than national goal
4 = Specific goal is expressed; same as national goal
5 = Specific goal is expressed; higher than national goal

The total score of all the goals combined represents the level of goal setting of environmental goals in a local council coalition agreement. This means that a total score of 3 is the lowest possible score and a total score of 20 is the highest possible score.

The national benchmark for aforementioned environmental goals is as follows:

- In 2020 CO2-emissions must be reduced with 20% (relative to 1990 levels).
- In 2030 CO2-emissions must be reduced with 49% (relative to 1990 levels).
- All buildings must be disconnected from gas in the year 2050.
- In 2050 the Netherlands must be climate neutral.

All municipalities from the sample, which is elaborated upon in Paragraph 3.3, participated in the municipal elections of March 21, 2018. Thus, municipalities formulated their environmental goals in accordance with the international and national standards which were available at that time. Consequently, the benchmark for this study is based upon the goals which were announced up until then by the Dutch government. The source and determination date as set by the national government of each goal are now discussed:

Goal 1: Reduction of CO2-emissions

> *In 2020 CO2-emissions must be reduced with 20% (relative to 1990 levels).*
> *In 2030 CO2-emissions must be reduced with 49% (relative to 1990 levels).*

The Climate Accord of Paris which was agreed to in December 2015 set goals for Europe in regard to greenhouse gas emissions in the year 2020, 2030 and 2050 (Rijksoverheid, 2019). For the year 2030, the current Dutch government expressed in their coalition accord they wish to increase the goal to a reduction of 49%, instead of 40% ("Vertrouwen in de Toekomst: Regeerakkoord 2017-2021 [Trust in the Future: Coalition Accord 2017-2021]," 2017).

Goal 2: Disconnection from gas

> *All households must be disconnected from gas in the year 2050.*

In the Energieagenda [Energy Agenda], (Ministerie van Economisch Zaken [Ministry of Economic Affairs], 2016), a publication of the outlines of future energy policy, the goal to disconnect all Dutch households from gas in the year 2050 is announced.

Goal 3: Climate neutrality

> *In 2050 the Netherlands must be climate neutral.*

In the Energieagenda [Energy Agenda], (Ministerie van Economisch Zaken [Ministry of Economic Affairs], 2016), the goal to be climate neutral, i.e. CO2-neutral, in the year 2050 is announced. Though it is also expressed that this goal is not one hundred percent feasible, the aim is a low-carbon economy in 2050.

Data about the level of goal setting of environmental goals of each local council coalition was collected by analyzing local council coalition agreements of 2018-2022. The agreements were retrieved from the websites of municipalities. Appendix B shows a list of the titles of the coalition accords and their publishing data per municipality which were used for the analysis. (Dutch) words, and synonyms, which are mentioned in the three types of environmental goals

were used as search terms in the coalition accords. Accordingly, the level of goal setting was calculated for each local council coalition. The mother tongue of the researcher is Dutch, which means she possessed the expertise which was needed to conduct the analysis. Following words were searched for in the agreements:

- CO2 [CO2]
- CO2-uitstoot [CO2-emissions]
- CO2 (prestatie)ladder [CO2 (performance) ladder]
- Uitstoot [Emissions]
- Emissie [Emission]
- Broeikas [Greenhouse]
- Broeikasgas(sen) [Greenhouse gases]
- Gas [Gas]
- Aardgas [Natural gas]
- Gasvrij [Gas free]
- Aardgasloos [Natural gas free]
- Gasloos [Gas free]
- Aardgasvrij [Natural gas free]
- Neutraal [Neutral]
- Klimaat [Climate]
- Klimaatneutraal [Climate neutral]
- Energie [Energy]
- Energieneutraal [Energy neutral]
- CO2-neutraal [CO2 neutral]
- CO2-vrij [CO2 free]
- Hernieuwbare energie [Renewable energy]
- Duurzame energie [Sustainable energy]
- Energievoorziening [Energy supply]
- Groene stroom [Green energy]

By studying some agreements more in detail, words were added to this list as the analysis advanced. For example, first the agreements were only screened on ‘gasvrij’, but later on the word ‘gasloos’ was found, both of which are Dutch expressions of ‘gas free’. Once all of the

agreements were studied, they were studied again with the new list of words as they were added on during the analysis. The list presented here is the full list of words which was used in the analysis of goals in the agreements. From the context in which these words were found (or not) the level of goal setting was decided. Mention of a time period (year, month, day) and/or quantity (percentage, number), in addition to contextual goal setting words and expressions, revealed the goal of the local council coalition. Consequently, this goal was compared by the benchmark of the national government and the scale was used to calculate the points of each goal per local council coalition, resulting in the total scores. When in a goal the time deadline was set earlier, but the quantity lower (and vice versa), a score of 4,5 was granted for the goal. In the list some words are included which relate to energy. This was to establish whether an additional goal should be added to the level of goal setting: a goal which says something about reaching energy neutrality in a certain year or aiming for a certain percentage of renewable or sustainable energy. However, these terms were used interchangeably. It was difficult to determine what exactly a local council coalition agreement would refer to when using these words. For this reason, an additional goal about energy was not added. Although 'climate neutral', 'CO2 neutral' and 'energy neutral' tend to be used interchangeably, they do not mean the same things. Energy neutrality undoubtedly refers to something different than climate and CO2 neutrality, as it merely focuses on energy consumption and production. Although by definition climate neutrality and CO2 neutrality do not mean the exact same thing, for the purpose of this research both were coded as the third goal of climate neutrality. CO2 neutrality leaves other fossil fuels out of the equation of climate neutrality but because CO2 is the main emission which is spoken about in public debates concerning the environment, CO2 neutrality and climate neutrality were treated as being the same.

Political composition

The political composition of a local council coalition refers to the make-up of political ideologies in a coalition. The political composition of a local council coalition was measured by assigning two separate scores to each local council coalition in terms of its position on the left-right and conservative-progressive spectrum. Both scores range from -2 to +2. A score of -2 means a party is on the far left or far conservative side, whereas a score of +2 means a party is on the far right or far progressive side. As is further expanded upon in Paragraph 3.3, local council coalitions with local parties, tied to a specific municipality, were excluded from this research. This means that the local council coalitions under study are made up of local

branches of national parties. For these national parties, a position on both dimensions of the political spectrum is calculated by 'Het Kieskompas'. The positions of all national parties on the political spectrum is provided in Appendix C (Krouwel, 2017). With this information, a position on both the left-right and conservative-progressive dimension was calculated for each local council coalition as follows:

First, the number of seats per national party in a local council coalition was decided by using the data from the tool published by de Volkskrant ("Welk college heeft uw gemeente nu? [Which council does your municipality have now?]," 2018) and the websites of each municipality (list is shown in Appendix A). This number was expressed in a percentage of the total amount of seats. Accordingly, the political composition of a local council coalition was calculated by using the scores on both dimensions of the political spectrum of national parties as published by 'Het Kieskompas' and multiplying these with the relative presence of a party in a local council coalition. The sum of these separate scores expresses the political composition of a local council coalition on the left-right and conservative-progressive dimension. To clarify this process, an example calculation is given in Figure 3.1, using random numbers.

Local Council Coalition X (LCCX) has 12 seats of which

- *25% are held by Party A;*
- *and 75% are held by Party B.*

Their national scores on both the left-right (LR) and conservative-progressive (CP) dimension are as follows:

- *Party A:*
  - *LR = 1,50*
  - *CP = -1,22*
- *Party B:*
  - *LR = -0,92*
  - *CP = 1,33*

Party A, LR *25% * 1,50 = 0,375*
Party B, LR *75% * -0,90 = -0,675*
Left-right score of LCCX is: 0,375 -0,675 = ***0,30***

Party A, CP *25% * -1,20 = -0,3*
Party B, CP *75% * 1,75 = 1,3125*
Conservative-progressive score of LCCX is: -0,3 + 1,3125 = ***1,0125***

Figure 3.1 Example calculation of political composition

Municipality scale

The variable ‘municipality scale’ was measured by using two indicators: municipality size and degree of urbanization. Both are now further explained:

Municipality size

This refers to the size of a municipality in terms of its inhabitants. The size of a municipality is expressed in a score from 1 to 8:

1 = Less than 5.000 inhabitants
2 = 5.000 to 10.000 inhabitants
3 = 10.000 to 20.000 inhabitants
4 = 20.000 to 50.000 inhabitants
5 = 50.000 to 100.000 inhabitants
6 = 100.000 to 150.000 inhabitants
7 = 150.000 to 250.000 inhabitants
8 = 250.000 inhabitants or more

This scale is invented by the Central Bureau for Statistics of the Netherlands, the data for this research was retrieved from them as well (CBS, 2018). It is unclear whether a municipality with 10.000 inhabitants would fit into category 2 or 3 on the scale. The data is copied exactly from the Central Bureau for Statistics of the Netherlands. It was assumed these categories were chosen because no municipalities exist which has a rounded number of inhabitants. However, this is unknown, and the scale is thus not completely flawless.

Degree of urbanization

This refers to how urbanized a municipality is or not. The degree of urbanization of a municipality is expressed in a score from 1 to 5:

1 = Very strongly urban
2 = Strongly urban
3 = Moderately urban
4 = Minimally urban
5 = Not urban

This scale is invented by the Central Bureau for Statistics of the Netherlands, the data for this research was retrieved from them as well. The classification of municipalities by degree of urbanization is based on the address density of the municipality. The address density of an area with a radius of 1 km around that address has been determined for each address within a municipality. The address density of a municipality is the average value for all addresses within that municipality. The five urban classes are based on class boundaries of respectively 2500, 1500, 1000 and 500 addresses per km² (CBS, 2018).

3.3 SAMPLE AND SAMPLING

After the municipal reorganization of January 2019, the Netherlands has 356 municipalities (CBS, 2019). For the sample selection, municipalities with local parties (those tied to a specific municipality) in their coalition were excluded from the research. For these parties no data is available about their position on the political spectrum. The same goes for coalitions which include party combinations of national parties, such as local collaboration of GroenLinks and PvdA, no data is available about their position on the political spectrum as well. This means that the variable of political composition could not be calculated for local council coalitions which include these types of parties. As a result, the variable cannot be controlled for which is important, because it is part of the conceptual model. For hypothesis 2 it is also necessary to calculate the political composition of local council coalitions, which excludes local council coalition with local parties from the sample selection as their political composition cannot be calculated due to their lack of data. By only including local branches of national parties, existing scores of the national parties as provided by 'Het Kieskompas' can be used to calculate the political composition of a local council coalition. Furthermore, only municipalities which participated in the elections which were held at March 21, 2018 were included in the sample (Kiesraad, 2018). In these municipalities, coalitions and local council coalition agreements were formed before the initiative for a climate law was taken and before the publication of the Dutch climate accord, which means they all based their agreements on the same available information. For some municipalities, no local council coalition agreement could be retrieved. Some municipalities had not published one, others had published some type of agreement, but they were implementation programs [collegeprogramma's] rather than coalition agreements. These municipalities were excluded from the study as well, because implementation programs are more detailed than coalition agreement which would make the comparison unfair. Ultimately, the total sample size

amounted to 50 local council coalitions.

Table 3.1 shows the steps which were taken in the sample selection and how many local council coalitions remained at each step.

	Number of municipalities or local council coalitions which met the criteria	**Remaining number of municipalities/local council coalitions**
Starting point: List of municipal classification as of January 1, 2019.	356	356
Step 1: Excluded local council coalitions with local parties and party combinations of national parties.	263	93
Step 2: Excluded municipalities which did not participate in the elections held at March 21, 2018.	20	73
Step 3: Excluded municipalities which did not provide information about the composition of their local council coalition.	4	69
Step 4: More cases were eliminated during data analysis for one of the following reasons: > local council coalition differs from initial analysis and remaining local council coalition includes a local party or party combination of national parties; > no local council coalition agreement was available.	19	**50**

Table 3.1 Steps taken in sample selection

3.4 DATA ANALYSIS

Using the collected data, analyses were performed in SPSS to demonstrate whether these is an association between the independent and dependent variable by analyzing the correlation. Because 'political participation of women' is a scale variable and 'level of goal setting' is an ordinal variable, Spearman's rho was used to test the correlation. Subsequently, the variables 'municipality scale' and 'political composition' were used as control variables in analyses to establish possible confounding explanations for correlation. As these variables all have an ordinal measurement level, Kendall's tau was used to test for correlations.

3.5 RELIABILITY AND VALIDITY

A limitation of the reliability of this research lies in the scale which was used to measure the level of goal setting of environmental goals. Mistakes could have been made by the researcher when analyzing local council coalition agreements for environmental goals; certain goals

could have been formulated differently than expected, therefore left undiscovered, which then results in a false total score for level of goal setting. To limit the consequences of such mistakes and safeguard reliability in coding, several local council coalition agreements were studied in detail, to get familiar with the language and hence, discover more keywords to look for. Validity problems might occur as well. Local council coalition agreements alone might not have been sufficient to determine the level of goal setting within a coalition; additional documents might have been published which express more detailed environmental ambition. It is important to acknowledge this limitation as it might result in a lower score for environmental goal setting, although this level might have been higher when taking additional documents into account. Thus, this research only measures the *initial* level of goal setting which happens in a local council coalition agreement.

The following chapter presents the results of the study.

4 RESULTS

In this chapter the results of the study are presented. Divided into three subsequent paragraphs, the results of testing the three hypotheses are shown, and a conclusion is reached about whether to reject or (party) accept the hypothesis.

4.1 HYPOTHESIS 1

Based on the scatterplot shown in Figure 4.1, no monotonic relationship is revealed between the variables 'political participation of women' and 'level of goal setting'. Several data points lie far away from the line of best fit.

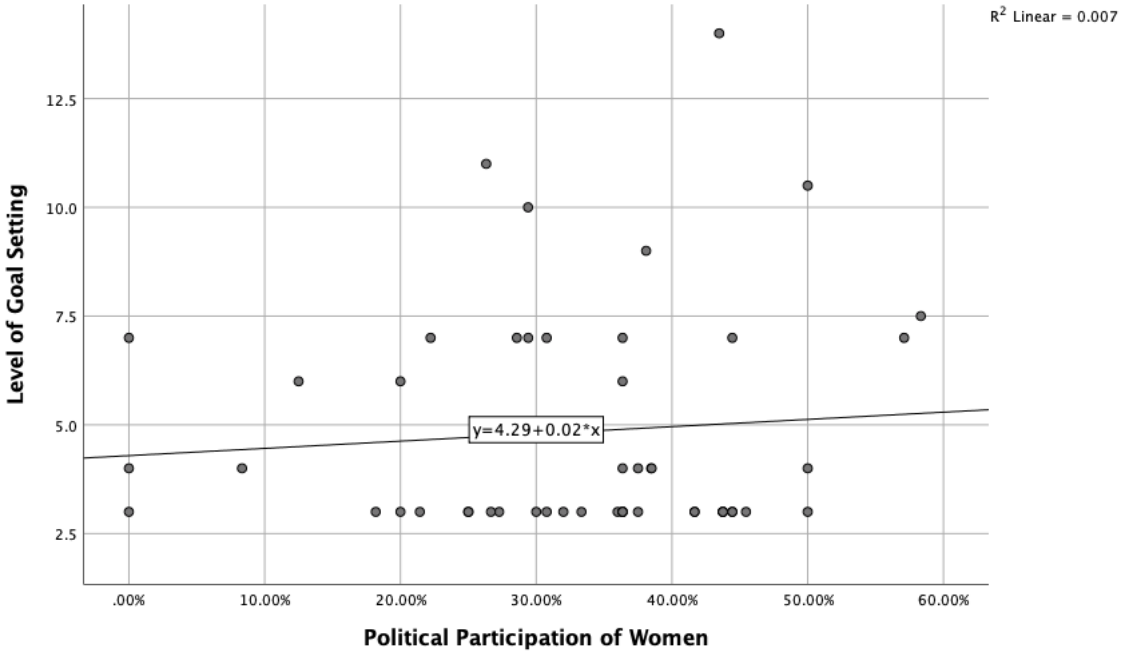

Figure 4.1 Scatterplot of 'Political Participation of Women' and 'Level of Goal Setting'

When testing for correlation using Spearman's rho, a weak positive correlation (r = 0,027) is found between the political participation of women and the level of goal setting. Indeed, the significance level of p = 0,854 confirms that there is no correlation between the two variables, as p is significant at < 0,05. Correlation results are shown in Table 4.1.

			Level of Goal Setting	Political Participation of Women
Spearman's rho	Level of Goal Setting	Correlation Coefficient	1.000	.027
		Sig. (2-tailed)	.	.854
		N	50	50
	Political Participation of Women	Correlation Coefficient	.027	1.000
		Sig. (2-tailed)	.854	.
		N	50	50

Table 4.1 Correlations between 'Political Participation of Women' and 'Level of Goal Setting'

Hypothesis 1, *a higher political participation of women in a local council coalition leads to a higher level of goal setting of environmental goals,* can be rejected.

A possible explanation for the absence of the relationship between the political participation of women and the level of goal setting in a local coalition agreement, could be that there were few local council coalitions who had goals higher than the national benchmark. Because of this, scores did not differ greatly between municipalities. The frequency of different levels of goal setting is shown in Table 4.2. More than half of the municipalities did not score above the base level of 3 for level of goal setting. The scatterplot does display some outliers, but it was decided not to run an analysis without outliers, because in 26 local council coalition agreements the environmental goals which were included in the level of goal setting were not mentioned. This results in a lack of variety between the level of goal setting of environmental goals between municipalities, which indicates that a reflection upon the reason behind this is more interesting rather than an additional statistical test which would offer little added value.

Level of Goal Setting

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	26	52.0	52.0	52.0
	4.0	7	14.0	14.0	66.0
	6.0	3	6.0	6.0	72.0
	7.0	8	16.0	16.0	88.0
	7.5	1	2.0	2.0	90.0
	9.0	1	2.0	2.0	92.0
	10.0	1	2.0	2.0	94.0
	10.5	1	2.0	2.0	96.0
	11.0	1	2.0	2.0	98.0
	14.0	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table 4.2 Scores for Level of Goal Setting

In Table 4.3, Table 4.4 and Table 4.5 it is shown how often different scores on the scale were granted to a municipality per goal.

Reduce CO2 emissions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	44	88.0	88.0	88.0
	2.00	2	4.0	4.0	92.0
	4.00	3	6.0	6.0	98.0
	4.50	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table 4.3 Scores for Goal 1

Disconnect houses from gas

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	38	76.0	76.0	76.0
	2.00	6	12.0	12.0	88.0
	4.00	2	4.0	4.0	92.0
	4.50	1	2.0	2.0	94.0
	5.00	3	6.0	6.0	100.0
	Total	50	100.0	100.0	

Table 4.4 Scores for Goal 2

Climate neutrality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	36	72.0	72.0	72.0
	2.00	1	2.0	2.0	74.0
	4.00	3	6.0	6.0	80.0
	5.00	10	20.0	20.0	100.0
	Total	50	100.0	100.0	

Table 4.5 Scores for Goal 3

Especially for the goal of the reduction of CO2 it is not surprising that only one local council coalition had a goal higher than the national government. The emission of CO2 is difficult to measure and regulate on a municipality basis, hence making it difficult to set a specific goal for it. The same can be said for the goal of climate neutrality. For example, the permissible amount of CO2 emitted by factories is largely regulated on a national level. This could be a reason why municipalities do not make any claims about reducing their CO2 emissions and being climate neutral. They have a limited influence on these goals and making such claims would largely be symbolic which is a political move a municipality might want to avoid. However, in the goal of disconnecting houses from gas there is more freedom and possibility

to set a municipality specific goal. A municipality is more involved with what happens in terms of (re)construction in their municipality, which means they can influence regulation about the connection of these (re)constructed houses to gas. The goal is easily measurable and because the national benchmark is set far in the future, 2050, it leaves room for ambition in policies. Despite this, only three to four municipalities set a goal higher than the national benchmark. Most of the time, the three goals were simply not mentioned in local council agreements. A reason could be that municipalities perceive these goals as a given, as they are set for the entire nation. Because the goals are decided on a higher level than the local level, a municipality is also dependent on other levels of government when it comes to reaching these goals. Most local council coalition agreements did express environmental concern and described how the municipality would tackle some environmental issues. However, most of these goals were inexplicit and unquantifiable and related to municipal policies. Examples of these goals are: 'setting up a sustainability fund', 'creating a higher level of waste separation', 'establishing a climate knowledge center', 'focusing on sustainable energy' and 'continuing to grant subsidies for sustainable practices'. Also, some local council coalition agreements referred to a 'sustainability agenda' or some other type of document in which they further expanded upon their environmental goals. Furthermore, in some local council coalitions, there were some remarks on existing or new plans for building windmills or developing solar parks. From the analysis of the agreements it appears as if the local council coalition are more focused on environmental goals which are tied to municipal policies and plans.

4.2 HYPOTHESIS 2

The sample was stratified to reduce possible effects of the political composition of the local council coalition on their level of goal setting. Due to this, the sample size was reduced from a possible selection of 356 municipalities to 50 municipalities. In addition to the explanation mentioned so far, the smaller sample size could have had an effect on the correlation results as well. With a smaller sample size, the chance of a correlation between variables is lower. The reason for excluding the majority of local council coalitions from the sample, is the possible effect of the political composition of a local council coalition on the level of goal setting. Because there is no data about the position on the political spectrum for the excluded local council coalitions, there cannot be controlled for the effect of political composition in the relationship between political participation of women and the level of goal setting. Thus, additional analyses were performed to determine whether the political composition of a local

council coalition has an effect on the level of goal setting. In case there is no correlation between the political composition of a local council coalition and the level of goal setting, expanding the sample size is an option. Hence, correlations between the control variable(s) 'political composition' and the dependent variable 'level of goal setting' were tested when considering expanding the sample size. The scatter plots for the correlation with both dimensions of the political composition, left-right and conservative-progressive, are shown in Figure 4.2 and Figure 4.3.

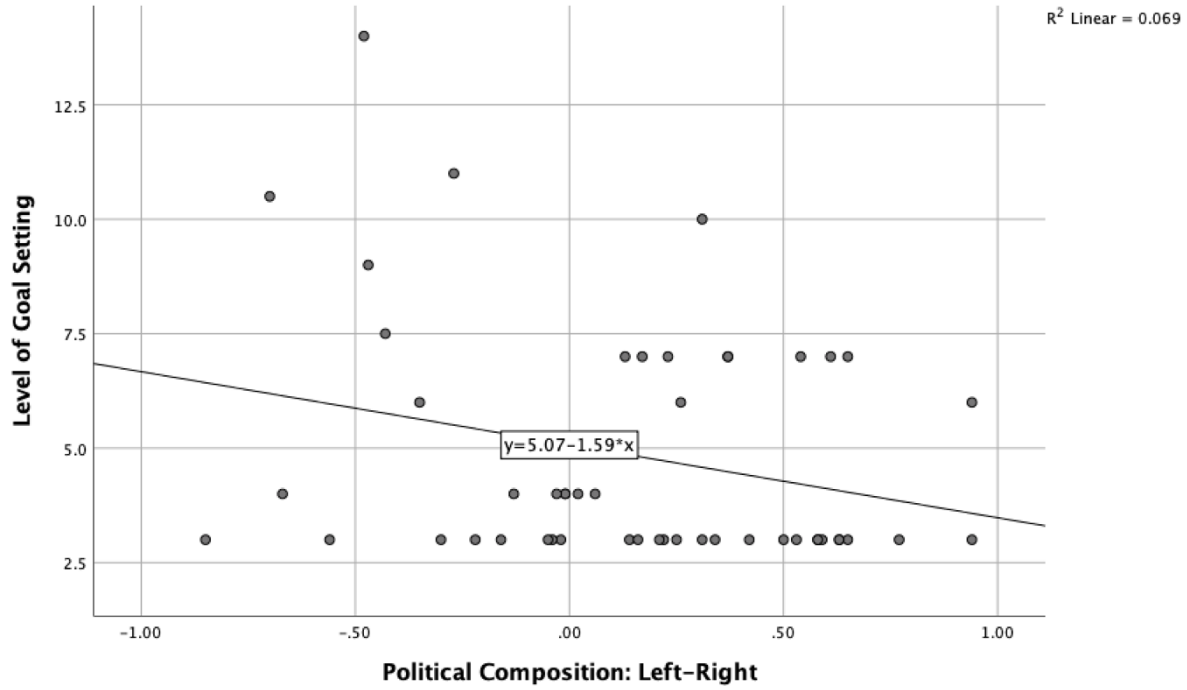

Figure 4.2 Scatterplot of 'Political Composition: Left-Right' and 'Level of Goal Setting'

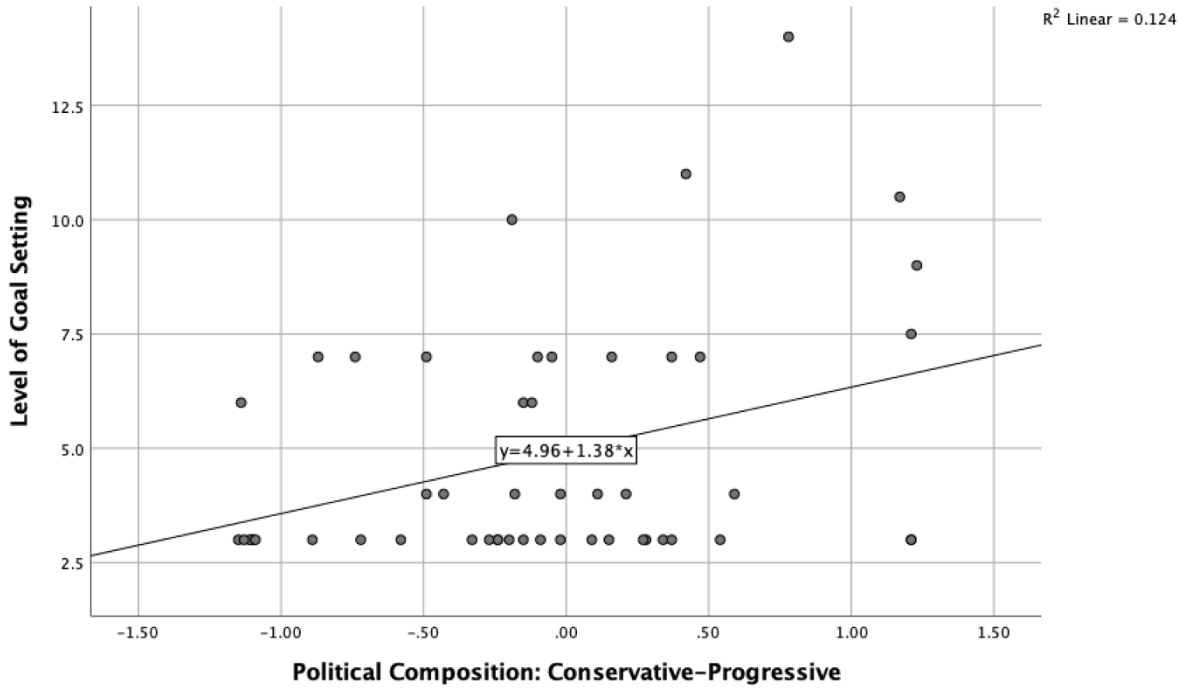

Figure 4.3 Scatterplot of 'Political Composition: Conservative-Progressive' and 'Level of Goal Setting'

For the 'Left-Right' political composition correlation, several data points lie far from the line of best fit. As for the 'Conservative-Progressive' political composition correlation the data points lie a bit closer to the line of best fit, although there are some outliers. Both correlations were tested using Kendall's tau. Results are shown in Table 4.6 and Table 4.7.

			Level of Goal Setting	Political Composition: Left-Right
Kendall's tau_b	Level of Goal Setting	Correlation Coefficient	1.000	-.168
		Sig. (2-tailed)	.	.120
		N	50	50
	Political Composition: Left-Right	Correlation Coefficient	-.168	1.000
		Sig. (2-tailed)	.120	.
		N	50	50

Table 4.6 Correlations between 'Political Composition: Left-Right' and 'Level of Goal Setting'

			Level of Goal Setting	Political Composition: Conservative –Progressive
Kendall's tau_b	Level of Goal Setting	Correlation Coefficient	1.000	.230*
		Sig. (2-tailed)	.	.033
		N	50	50
	Political Composition: Conservative–Progressive	Correlation Coefficient	.230*	1.000
		Sig. (2-tailed)	.033	.
		N	50	50

Table 4.7 Correlations between 'Political Composition: Conservative-Progressive' and 'Level of Goal Setting'

A weak negative correlation is found between the 'Left-Right' dimension and 'Level of Goal Setting'. However, with a significance level of p = 0,120 the correlation is insignificant, as p is significant at < 0,05. A weak positive correlation is found between the 'Conservative-Progressive dimension and 'Level of Goal Setting'. Because p is significant at < 0,05 with a correlation of p = 0,033 the results are significant. Since there is no data available about the political position on the 'Conservative-Progressive' dimension for local parties, it was decided to not further expand the sample size, as the correlation results between the political participation of women and the level of goal setting could be influenced by this political dimension, resulting in false correlations between the independent and dependent variable.

Hypothesis 2, *there is a correlation between the political composition of a local council coalition and the level of goal setting of environmental goals,* can be partly accepted as there is a significant, though weak, positive relationship between one dimension of the political composition of a local council coalition, the 'Conservative-Progressive' dimension, and the level of goal setting. This means that when the political composition of a local council is more progressive, the level of goal setting is higher.

This correlation is in line with the general idea that progressive parties tend to focus more on the environment than conservative parties. This shows by comparing the position on environmental statements of the two most progressive parties: GroenLinks and D66, with the position of the most conservative party: VVD (party scores are shown in Appendix C). 'Het Kieskompas' published two statements in regard to the environment:

1. Stricter climate legislation must be introduced, even if it is at the expense of economic growth.
2. The nuclear power plant in Borssele must remain open.

They positioned each party on a five-point Likert scale from completely agree to completely disagree using data from public statements and election programs published by parties (Kieskompas, 2017). GroenLinks completely agrees with the first statement and completely disagrees with the second statement. D66 agrees with the first statement and completely disagrees with the second statement. This expresses progressive views: valuing the environment above economic growth and encouraging the closure of nuclear plants. VVD disagrees with the first statement and agrees with the second statement. This articulates conservative views: a high regard for economic growth. It thus makes sense that a more progressive local council coalition would have a higher level of goal setting of environmental goals.

4.3 HYPOTHESIS 3

Another control variable in the model is ‘municipality scale’. This variable was separated into two measurement levels: the degree of urbanization and municipality size. Scatterplots of both relationships with the dependent variable are shown respectively in Figure 4.4 and Figure 4.5.

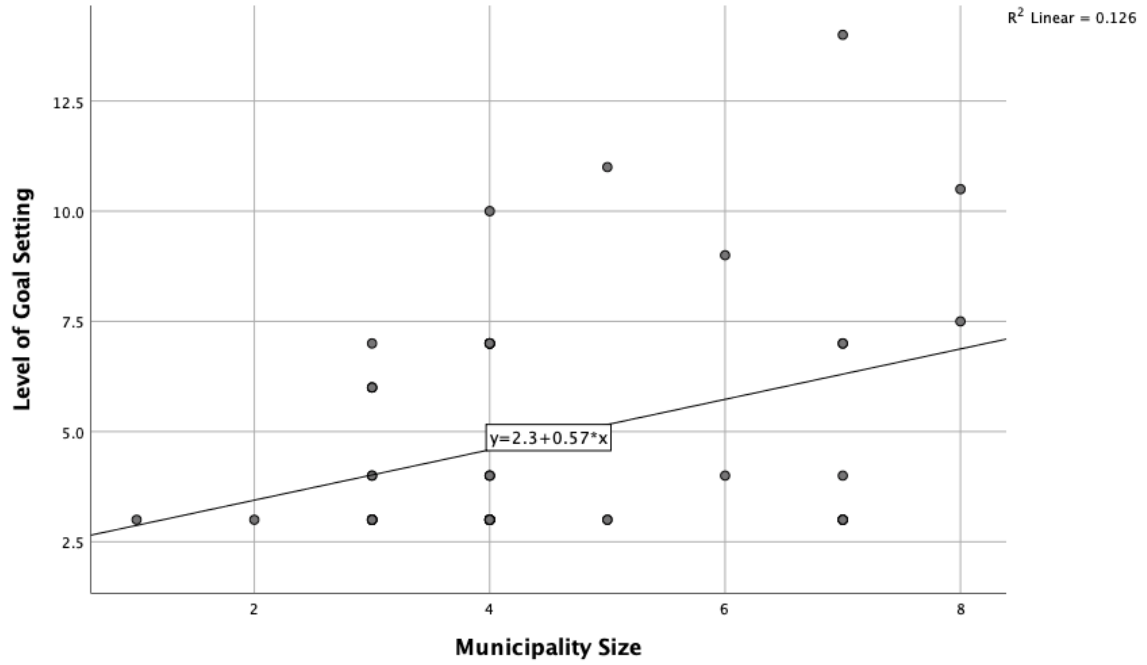

Figure 4.4 Scatterplot of 'Municipality Size' and 'Level of Goal Setting'

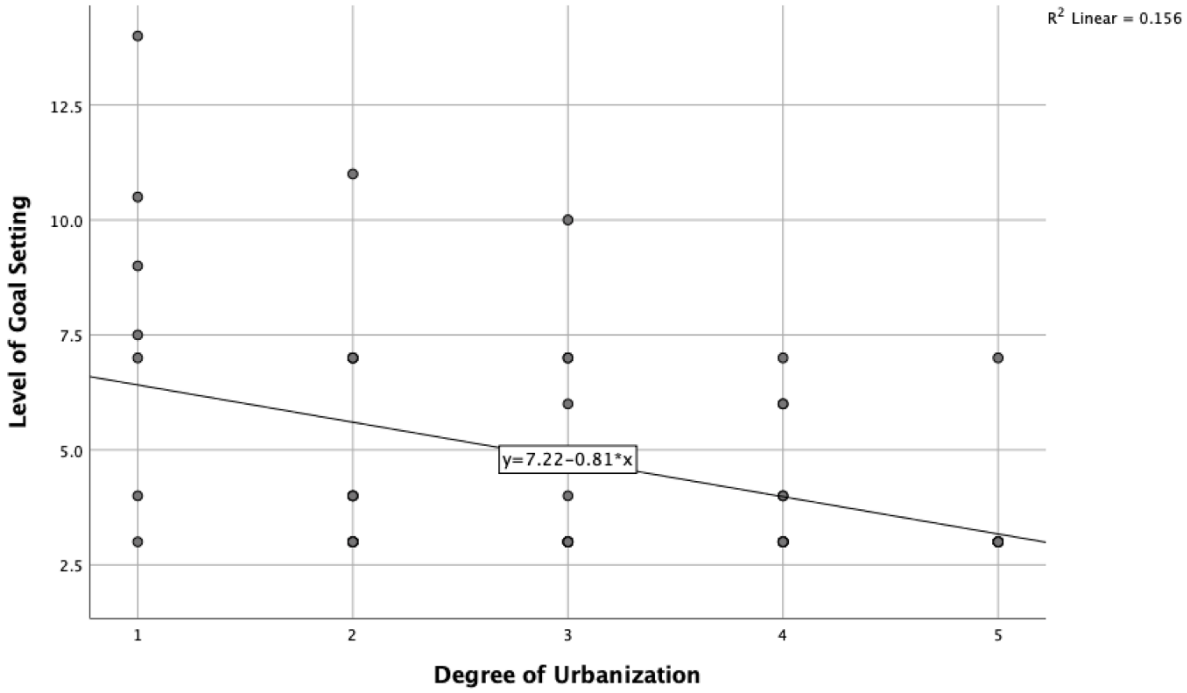

Figure 4.5 Scatterplot of 'Degree of Urbanization' and 'Level of Goal Setting'

The scatterplot which displays the correlation between municipality size and level of goal setting seems to demonstrate somewhat of a monotonic relationship. But many outliers can be observed. The scatterplot which displays the correlation between degree of urbanization and level of goal setting suggests a monotonic relationship between the variables. Both correlations were tested using Kendall's tau. Results are shown in Table 4.8 and Table 4.9.

			Municipality Size	Level of Goal Setting
Kendall's tau_b	Municipality Size	Correlation Coefficient	1.000	.226
		Sig. (2-tailed)	.	.058
		N	50	50
	Level of Goal Setting	Correlation Coefficient	.226	1.000
		Sig. (2-tailed)	.058	.
		N	50	50

Table 4.8 Correlations between 'Municipality Size' and 'Level of Goal Setting'

			Level of Goal Setting	Degree of Urbanization
Kendall's tau_b	Level of Goal Setting	Correlation Coefficient	1.000	-.322**
		Sig. (2-tailed)	.	.006
		N	50	50
	Degree of Urbanization	Correlation Coefficient	-.322**	1.000
		Sig. (2-tailed)	.006	.
		N	50	50

Table 4.9 Correlations between 'Degree of Urbanization' and 'Level of Goal Setting'

A positive, weak correlation coefficient of $\tau_b = 0{,}226$ with a significance of $p = 0{,}058$ (p is significant at < 0,05) shows that indeed there is no relationship between the size of a municipality and the level of goal setting. Between the variables 'degree of urbanization' and 'level of goal setting' a significant negative, moderate relationship is demonstrated ($\tau_b = -0{,}322$, $p = 0{,}006$).

Hypothesis 3, *there is a correlation between the scale of a municipality and the level of goal setting of environmental goals,* can be partly accepted as there is a significant, moderate, negative relationship between one measurement level of municipality scale, the degree of urbanization, and the level of goal setting. Thus, when a municipality is more urban, the level of goal setting of a local council coalition agreement is higher.

The next chapter answers the research question by giving a short overview of the conclusions of the study.

5 CONCLUSION

This research aimed to answer to what extent the political participation of women in local council coalitions in the Netherlands have a positive influence on the level of goal setting of environmental goals in local council coalition agreements of the legislative period of 2018-2022. Because the literature suggests that women are more environmentally concerned than men, it was expected that local council coalitions with a higher political participation of women have a higher level of goal setting of environmental goals in their local council coalition agreements. The following hypothesis was tested:

> *Hypothesis 1: A higher political participation of women in a local council coalition leads to a higher level of goal setting of environmental goals.*

This hypothesis was rejected. No relationship was found between the political participation of women in a local council coalition and the level of goal setting of environmental goals. A possible explanation for the absence of a relationship could be that the level of goal setting per local council coalition was calculated in terms of its difference to the national benchmark for three quantifiable environmental goals. A difference in the level of goal setting was not observed often. In fact, in most local council coalition agreements the goal was not even stated. It could be the case that local council coalitions perceive these goals as a given and thus do not remark them in their agreements. Moreover, the type of goals which were analyzed left little room for ambition as they are difficult to measure and regulate at the municipal level.

In addition to the first hypothesis, the following two hypotheses which examine the influence of control variables on the level of goal setting were tested:

> *Hypothesis 2: There is a correlation between the political composition of a local council coalition and the level of goal setting of environmental goals.*
> *Hypothesis 3: There is a correlation between the size of a municipality and the level of goal setting of environmental goals.*

Hypothesis 2 can be partly accepted as there is a significant, though weak, positive relationship between the ‘Conservative-Progressive’ political dimension, and the level of goal

setting. This means a more politically progressive local council coalition has a higher level of goal setting. Hypothesis 3 can be partly accepted as well as there is a significant, moderate, negative relationship between the degree of urbanization and the level of goal setting. A more urban municipality has a higher level of goals setting in their local council coalition agreement.

In the next chapter the implications of the results and conclusion are discussed.

6 DISCUSSION

In this chapter the results of the study are discussed by first addressing its limitations, followed by theoretical and practical implications of the study. To conclude, some recommendations are made.

6.1 LIMITATIONS

Naturally, this study has its limitations. One limitation is the size of the sample, which with 50 municipalities out of the existing 356 in the Netherlands, is on the smaller side. Particularly because of the exclusion of local council coalition with local parties, the number of municipalities included in the study decreased considerably. With a smaller sample size, it is more challenging to find statistically significant relationships. However, in order to prevent confounding variables from influencing the relationship at study, restrictions on the sample selection were not relaxed and the sample size was not expanded. Another way in which the study was limited is in its operationalization of the variable 'level of goal setting'. Specific environmental goals which contained a direction and a year and/or quantity were chosen as a means to easily compare between the goals of municipalities and those of the national government. To test for correlations, it is also necessary to use quantitative measurements. Although this increased the reliability of the results as in this way the comparison process was straightforward and unambiguous because of its quantitative qualities, it left out many types of environmental goals. Especially those goals in which a municipality has more freedom to create their own policies and goals which are more relevant at a municipal level. As a result, scores on the 'level of goal setting' scale were fairly low and offered little variety between local council coalitions. Because of this lack of variety, there is a lower chance of a significant relationship between the political participation of women and the level of goal setting.

6.2 THEORETICAL IMPLICATIONS

The findings of this study align with those of other scholars who found that although women are more environmentally concerned than men, it does not translate to activism in their personal or professional life (Tindall, Davies & Mauboulès, 2003; Braun, 2010; Mohai, 1992; McStay & Dunlap, 1983; Mitchell, 1979). Of course, in this study personal attitudes of local councilors towards the environment were not measured, so it cannot be said that this study

precisely supports this statement. But considering the number of studies which have demonstrated a positive relationship between being a woman and environmental concern (Blocker & Eckberg, 1989; Brody, 1984; George & Southwell, 1986; Hamilton, 1985a, 1985b; Nelkins, 1981; Passino & Lounsbury, 1976; Solomon et al., 1989 1989), it could be that the absence of a relationship between the political participation of women in a local council coalition and the level of goal setting of environmental goals is caused by women's lack of activism. Specifically, their lack of activism in the decision-making process. Therefore, it could be interesting to study what causes this lack of activism in women. This could be related to the way in which women are socialized, which has been identified as a mediating factor in the relationship between environmental concern in men and women (Strapko, Hempel, MacIlroy & Smith, 2016; Zelezny, Chua, and Aldrich, 2000). For example, Dietz, Kalof, and Stern (2002) found that women value altruism more than men. Other than this having an effect on one's environmental attitude, this can also have an effect on how you engage in decision-making. The way in which women are socialized could also have an effect both on the political participation of women and the level of goal setting of environmental goals. It could be that women are socialized in such a way that they are less likely to pursue a political career which would cause a lower level of political participation of women. The way in which women are socialized could also affect the level of goal setting of environmental goals. Possibly, women who end up in a local council coalition are socialized in a more masculine way which would affect their concern for their environment, which would result in a lower level of goal setting of environmental goals. The absence of motherhood (Hamilton, 1985a) could strengthen this effect. Of course, variables other than those involving gender could also explain the lack of the relationship between the political participation of women and the level of goal setting of environmental goals. Factors such as network membership (Hoppe & Coenen, 2011) and having an organization unit focused on environmental policy in a municipality (Hoff & Strobel, 2013) could be a bigger drive behind the level of goal setting of environmental goals than gender. In further studies in public administration which investigate the effect of the gender composition of a local council coalition on the level of goal setting of environmental goals it would be interesting to study to what extent women in a local council coalition are socialized in a feminine way. In this study gender was interpreted as a binary concept, it would be interesting to see what the gender composition of a local council coalition is when a spectrum of socialization is used instead of assigning gender simply on the basis of sex. Also, studying other factors which affect the level of goal setting

of environmental goals is interesting as it could reveal factors which stimulate more ambitious environmental goals.

6.3 PRACTICAL IMPLICATIONS

In this study, no correlation was found between the political participation of women in local council coalitions and the level of environmental goal setting of local council coalition agreements. This means that the level of environmental goal setting does not seem to depend on the gender composition of a local council coalition. In striving for a higher number of women in (local) politics it can be useful to bring forward more arguments than just a normative claim. The claim that women in politics would produce more environmentally friendly policies cannot be supported with this research. Of course, this study studied a very specific type of political participation of women and environmental goals which needs to be taken into account when making this claim. Another implication is that in striving for a sustainable planet, other factors, instead of gender, should be investigated which encourage the most optimal outcome for the environment in policymaking. More women in local council coalitions does not seem to be contribute to this ambition. Other than practical implications, the outcomes of this study give rise to further research, which is addressed in the next paragraph.

6.4 RECOMMENDATIONS

To my knowledge, this is the first study which was done to determine whether there is a relationship between the political participation of women in a local council coalition and the level of goal setting of environmental goals. It is a great starting point to explore how research about the influence of women on environmental goals can be conducted. This study has a very quantitative approach in its method of comparing goals to ensure reliability of the results. However, a study into the influence of women on environmental goals on a local level might benefit more from a qualitative approach. In this way, more environmental goals can be included. Especially goals which are less quantitative, and which will show more variance between municipalities. Examples of such goals could be: ‘setting up a sustainability fund’, ‘creating a higher level of waste separation’, ‘establishing a climate knowledge center’, ‘focusing on sustainable energy’ ‘developing solar parks’, ‘building windmills’ and ‘continuing to grant subsidies for sustainable practices’. Thus, the variable of ‘level of goal

setting' could be adjusted to include these 'softer' goals. Although they are less rigorous and might complicate statistical analysis, they do allow for a broader variety of environmental goals. In these studies, the political composition of a local council coalition in terms of its position on the conservative-progressive spectrum and the size of a municipality in terms of its degree of urbanization should be included as control variables as they both influence the level of goal setting of environmental goals. In addition to changing the type of goals at study, the same type of research could also be repeated in another context which would allow for a bigger sample size. It could be conducted in a different country or at a different administrative level. Altering the methodology and/or context will extend the knowledge of the relationship between women in politics and their influence on environmental goals, either refuting or underlining the results of this study. Nevertheless, generating a more robust foundation for studies in the field of environmental and local policy and gender-oriented research.

Other than broadening the type of goals at study or the sample size, which are suggestions concerning the methodology, further research should also be focused on possible causes of the lack of a relationship between the political participation of women in a local council coalition and the level of goal setting of environmental goals. A study like this could be more focused on the decision-making process within a local council coalition and the role of women rather than the outcome of this process, i.e. the ultimate level of goal setting. As has been suggested by other authors, although women are more environmentally concerned, this does not show in their levels of activism compared to men. Research which is more focused on the decision-making process of local council coalitions might deliver insights about how women take their personal (environmental) concerns into account when executing their task as a local counselor. This will add to the existing research about decision-making at a local level, taking into account the gender of those making the decisions and their personal (environmental) concerns. Using the variable of gender as a spectrum of socialization rather than a binary concept could also deliver interesting insights.

In a time where environmental attention in policymaking is of vast importance, gaining knowledge about underlying relationships which influence environmental goal setting is fruitful in the optimization of the policy-making process. The way in which gender influences environmental goal setting could show us why equal participation of women in politics should not just be a normative aspiration but could also be necessary in creating adequate policies which are most optimal in achieving environmental goals. Also, optimizing the decision-

making process as to accommodate for more feminine approaches could be helpful in this. Evidently, more research is needed to reveal how these mechanisms work.

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APPENDIX A

Municipality	URL	Date of Retrieval
Alblasserdam	https://www.alblasserdam.nl/Gemeenteraad/Alle_onderwerpen/Wie_zitten_er_in_de_gemeenteraad	24-07-2019
Alkmaar	https://alkmaar.notubiz.nl/leden	24-07-2019
Almere	https://gemeenteraad.almere.nl	24-07-2019
Amersfoort	https://www.amersfoort.nl/bestuur-en-organisatie/to-3/leden-gemeenteraad.htm	24-07-2019
Amstelveen	https://ris2.ibabs.eu/People/Profiles/amstelveen/95aad6e4-6dcc-48a3-b723-ede665dbd7c9	24-07-2019
Amsterdam	https://www.amsterdam.nl/bestuur-organisatie/gemeenteraad/raadsleden-fracties/#	06-06-2019
Arnhem	https://ris2.ibabs.eu/People/Profiles/Arnhem/61635165-98f8-4674-a944-a86f1d7a2e49	24-07-2019
Bergeijk	https://ris2.ibabs.eu/People/Profiles/GemeenteBergeijk/2156fced-3af4-4957-8704-3588ea2cb02e	24-07-2019
Beverwijk	https://www.beverwijk.nl/bestuur/raadsleden_41598/	24-07-2019
De Bilt	https://debilt.raadsinformatie.nl/leden	24-07-2019
Bodegraven-Reeuwijk	https://gemeente.bodegraven-reeuwijk.nl/samenstelling-van-de-gemeenteraad	24-07-2019
Breda	https://www.breda.nl/gemeenteraad-samenstelling	31-07-2019
Bunschoten	https://www.bunschoten.nl/samenstelling-gemeenteraad	24-07-2019
Diemen	https://www.diemen.nl/bestuur/publicatie/samenstelling-gemeenteraad	24-07-2019
Dinkelland	https://gemeenteraad.dinkelland.nl/Gemeenteraad	24-07-2019
Eindhoven	https://eindhoven.parlaeus.nl/user/councilperiod	24-07-2019
Gennep	https://www.gennep.nl/bestuur-organisatie/samenstelling-gemeenteraad_42537/	24-07-2019
Gouda	https://www.gouda.nl/ris/Raadsinformatie/De_gemeenteraad/Samenstelling_Gemeenteraad	24-07-2019
Haarlem	https://gemeentebestuur.haarlem.nl/Gemeentebestuur	24-07-2019

Harlingen	https://www.harlingen.nl/bestuur/gemeenteraadsleden-harlingen_43019/	24-07-2019
Hattem	https://ris2.ibabs.eu/People/Profiles/Hattem/1d23d200-3d73-422c-80cd-84266d33ea26	24-07-2019
Heerenveen	https://www.heerenveen.nl/raadsleden/	24-07-2019
Hellendoorn	https://raad.hellendoorn.nl/gemeenteraad/publicatie/raadsleden	31-07-2019
Heumen	https://www.heumen.nl/bestuur/samenstelling-gemeenteraad_42403/	24-07-2019
Hof van Twente	https://gemeenteraad.hofvantwente.nl/Gemeenteraad	25-07-2019
Houten	https://www.houten.nl/bestuur-organisatie/gemeenteraad/leden-van-de-raad/	25-07-2019
Huizen	https://ris.gemeenteraadhuizen.nl/Organisatie	25-07-2019
Kapelle	https://www.kapelle.nl/home/samenstelling-gemeenteraad_44129/	25-07-2019
Leiden	https://gemeenteraad.leiden.nl/raadsleden/zetelverdeling/	25-07-2019
Lopik	https://www.lopik.nl/politiek-organisatie/gemeenteraad_41349/	25-07-2019
Losser	https://ris2.ibabs.eu/People/Profiles/Losser/0aeaf706-e685-4073-acda-044f77156969	25-07-2019
Maassluis	https://www.maassluis.nl/bestuur-en-organisatie/samenstelling-gemeenteraad_42831/	25-07-2019
Neder-Betuwe	https://neder-betuwe.notubiz.nl/leden	25-07-2019
Nijmegen	https://ris2.ibabs.eu/People/Profiles/Nijmegen/6d3a3013-00bb-480e-97ea-8518aaa0acf0	25-07-2019
Oost Gelre	https://www.oostgelre.nl/raadsleden	25-07-2019
Oostzaan	https://ris2.ibabs.eu/People/Profiles/oostzaan/72d7a45f-73a6-4eba-8990-019ba2c3dcb0	25-07-2019
Ouder-Amstel	https://www.ouder-amstel.nl/bestuur/publicatie/raadsleden	25-07-2019
Renkum	https://raad.renkum.nl/organisatie	31-07-2019
Rheden	https://www.rheden.nl/gemeenteraad/Gemeente_raad/Over_de_gemeenteraad/Raadsleden https://rheden.christenunie.nl/k/n26891/news/view/1206683/442566/christenunie-stabiele-factor-in-gemeenteraad-rheden.html	31-07-2019

Stadskanaal	https://gemeenteraadstadskanaal.nl/raadsleden.html	25-07-2019
Staphorst	https://www.staphorst.nl/bestuur/leden-gemeenteraad_42705/	25-07-2019
Terschelling	http://www.gemeenteraadterschelling.nl/gemeenteraad/raadsleden-en-raadscommissieleden_44096/	31-07-2019
Tholen	https://bestuur.tholen.nl/bestuur/samenstelling-gemeenteraad_41966	25-07-2019
Tilburg	https://www.raadtilburg.nl	25-07-2019
Utrecht	https://www.utrecht.nl/bestuur-en-organisatie/gemeenteraad/wie-zit-er-in-de-raad/	24-07-2019
Voorschoten	https://www.voorschoten.nl/bestuur-voorschoten/wie-is-wie-gemeenteraad-voorschoten_43802/	25-07-2019
Waterland	https://www.gemeenteraadwaterland.nl/raadsleden-per-partij	25-07-2019
Westervoort	https://www.westervoort.nl/samenstelling-gemeenteraad-0	25-07-2019
Wormerland	https://ris2.ibabs.eu/People/Profiles/wormerland/21749030-63f7-4675-84be-3ce974e76c38	25-07-2019
Zutphen	https://raad.zutphen.nl/gemeenteraad/leden?type=Raadslid https://zutphen.pvda.nl/organisatie/raadsleden/ https://zutphen.sp.nl https://zutphen.groenlinks.nl/mensen https://zutphen.vvd.nl/mensen	25-07-2019

APPENDIX B

Municipality	Title of local council coalition agreement	Date of Publication
Alblasserdam	Samen maken we Alblasserdam	May, 2018
Alkmaar	Alkmaar aan zet	June, 2018
Almere	Liefde voor Almere	May, 2018
Amersfoort	Samen aan de slag voor duurzame groei	June, 208
Amstelveen	Een zekere en stabiele toekomst voor Amstelveen	May, 2018
Amsterdam	Een Nieuwe Lente en een Nieuw Geluid	May, 2018
Arnhem	Coalitieakkoord Arnhem 2018-2022	May 27, 2018
Bergeijk	Coalitieakkoord "Samen Doen"	April 26, 2018
Beverwijk	Bouwen aan Beverwijk	May, 2018
De Bilt	Samen bouwen aan een topklimaat	June, 2018
Bodegraven-Reeuwijk	Samen Duurzaam Gezond	May 17, 2018
Breda	Lef en Liefde	May 29, 2018
Bunschoten	Vertrouwen in Bunschoten	May, 2018
Diemen	Duurzaam Samenleven	May 30, 2018
Dinkelland	Dinkelland Duurzaam Doorontwikkelen	May 15, 2018
Eindhoven	Evenwicht & Energie	May, 2018
Gennep	Kansen zien voor elkaar in grenzeloos Gennep	April 27, 2018
Gouda	Nieuwe energie	June 6, 2018
Haarlem	Duurzam doen	June 1, 2018
Harlingen	Bouwen aan een betere toekomst	May 8, 2018
Hattem	Met elkaar werken aan een duurzaam Hattem	May 31, 2018
Heerenveen	Duurzaam doorontwikkelen	June 1, 2018
Hellendoorn	Duurzaam Durven Doen	May 24, 2018
Heumen	Samen sterk en duurzaam	April 26, 2018
Hof van Twente	Samen Doen!	May 14, 2018
Houten	Duurzaam, ondernemend en dichtbij	June 1, 2018
Huizen	Vitaal en Verbindend	May 15, 2018
Kapelle	Coalitieakkoord 2018-2022	May, 2019
Leiden	Samen maken we de stad	May 17, 2018
Lopik	Kom op!	May, 2018
Losser	Met opgestroopte mouwen vooruit	May 29, 2018
Maassluis	Samen Maassluis	May, 2018
Neder-Betuwe	Samen bouwen aan Ruimte voor de Samenleving	April 26, 2018
Nijmegen	Nijmegen: samen vooruit	April 26, 2018
Oost Gelre	Volle kracht vooruit!	May 1, 2018

Oostzaan	Ambitieus, groen en zelfstandig Oostzaan	May, 2018
Ouder-Amstel	Betrokkenheid en daadkrachtig met openheid en optimisme	May, 2018
Renkum	Zes Dorpen, Eén Renkum.	May 23, 2018
Rheden	Rheden geeft Energie	May 9, 2018
Stadskanaal	Bestuursakkoord 2018-2022: Samen koersvast naar de toekomst	May, 2018
Staphorst	Samen, voor elkaar!	July 3, 2018
Terschelling	Krachtig Terschelling	May, 2018
Tholen	Samen Leven	April 19, 2018
Tilburg	Gezond en gelukkig in Tilburg	June 14, 2018
Utrecht	Utrecht: ruimte voor iedereen	May, 2018
Voorschoten	Duurzaam vooruitstrevend	June, 2018
Waterland	Duurzaam, sociaal en toekomstbestendig	April 28, 2018
Westervoort	Coalitieakkoord Westervoort 2018-2022	April, 2018
Wormerland	Voor elkaar	May 17, 2018
Zutphen	Met elkaar kleuren we Zutphen en Warnsveld	May 18, 2018

APPENDIX C

National Parties	Left-Right	Conservative-Progressive
50PLUS	-1.18	0.31
CDA	0.25	-1.06
CU	-0.08	-0.12
D66	0.08	1.33
DENK	-1.08	1.00
GL	-0.92	1.33
PvdA	-0.83	0.83
PvdD	-1.75	0.94
PVV	0.42	-1.39
SGP	0.50	-1.06
SP	-1.83	0.78
VNL	0.75	-0.94
VVD	1.50	-1.22

Please note that this is the complete dataset as provided by 'Het Kieskompas'. Not all parties were included in the study.