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The impacts of climate protests on opinion and policy: the case of the Netherlands 2019

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Abstract

Significant parts of society have had enough of the ongoing and increasing ecological crisis, known as climate change, caused by our current ways of living. Society is responding to the climate crisis through collective action and formatting climate movements. These movements are crucial in achieving social and political transformations. They have the power to influence political and media agendas. Protests, one of the major tools climate movements use to cause change, have the potency to increase awareness and urgency of the problem by motivating public and political action. Social movement studies usually emphasize their research focus on single causal factors, such as public opinion, the political environment, or electoral competition. Studies that combine multiple key measures, track them over time or compare them through multiple relevant units concerning policy outcomes are lacking.

The dissatisfaction with the status quo resulted in the largest global and national scaled climate protests in history in 2019. The impact of recent climate protests and how they affected the social- and political arena is still unclear. This research conducted an in-depth case study on if and how the series of climate protests between February and December 2019 affected public opinion and climate policies in the Netherlands. Determining a change in opinion was done by examining long-standing climate opinion polls and analyzing fluctuations in voting behaviour. Analyzing the parliamentary record determined a change in climate policies. Second, it explained why the series of 2019 climate protests caused a (lack of) change in public opinion and national climate policy. The research applied a media analysis to analyze if the in- and external conditions of the protest were found ideal. These conditions were derived from social movement and political process theory.

The first findings showed no link between changes in national climate policies linked and the 2019 climate protests. This research also did not find a link between changes in public climate concern, beliefs on climate responsibility, and the 2019 climate protests. At last, the protests' magnitudes, level of disruption, lack of providing feasible solutions, and presence of political allies are not believed to explain the lack of impact. The timing and somewhat modest targets and demands from the main protests' organizers can partly explain the lack of impact. Overall, this research implies that the 2019 climate protests had little to no impact on national climate policy and opinion.

Key words: Climate movement, Climate protests, Public opinion, Civil disobedience

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1 Introduction

Climate change, a result of increasing greenhouse gases in the Earth atmosphere, has become a common term over the last decades. The United Nations framework convention on climate change describes it as ‘a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere’ (Sands, 1992). The intergovernmental panel on climate change (IPCC) provided an assessment report on the impacts of an increasing global temperature by 1.5°C on natural and human systems. This assessment showed that global warming resulted in multiple catastrophic effects that endanger the ecosystems our society is currently relying on (Hoegh-Guldberg et al., 2018). Examples of this are extreme weather events such as hurricanes, heatwaves, droughts, and floods (IPCC, 2018). Human activity has sped up this changing atmosphere at a rate where ecological systems can no longer keep up (Rockström et al., 2019). Steffen et al. (2015) showed that since 1950 human activities rapidly impacted Earth’s geology and ecosystems. This ongoing and increasing ecological crisis calls for an understanding of the interaction between society and the environment. To prevent irreversible ecological impacts, new and more sustainable measures need to be implemented (Lélé, 1991; Van den Berg, 2012). However, there is no consensus on what these exact measures should look like and how climate change should be tackled (North, 2011). Some even argue that there is not a climate problem at all (Washington, 2013).

A large part of society has had enough and respond to the climate crisis through collective action and forming social climate movements. According to Ostrom (2004), ‘Collective action occurs when more than one individual is required to contribute to an effort to achieve an outcome. Accordingly, social movements are crucial in achieving social and political transformations to address climate change (Foster et al., 2011; Aronoff et al., 2019). According to Priest (2016), one of the most important consequences of social movements is influencing the political and media agenda. Protests are one of the main tools that social movements apply to cause change. They have the potency to increase awareness and urgency of the problem by motivating public and political action (Rochon, 2000; Bugden, 2020). Influencing opinion on the aggregate level could then steer political power holders to create changes in national policies (Giugni, 2007; Soule & Olzak 2004). Public opinion is defined as ‘beliefs, attitudes, policy support, and behavioural intentions of people and groups within a particular geographic location’ (Shwom et al., 2015 p.270). In most western democracies, the political system exists of elected representatives. Together these electives form the government, which creates and controls national policies. Political leaders in a democracy need to be supporting the public’s beliefs to gain their vote (Burstein, 1998). Going against the public’s majority view brings the risk of political leaders losing support and, therefore, future elections (Wlezien, 2017; Soule & Olzak, 2004). Consequently, public opinion plays a vital role in forming governments and creating policies.

Over the last decades, several scholars have addressed social movements by researching their outcomes. These scholars looked into various social- and political impacts (Giugni, 2007; Andrews, 1997; Soule et al., 1999; Agnone, 2007). Most studies focus on social movement’s efficiency and answering the when, why and how social movements are directly or indirectly achieving social- and political change (Mcadam & Su, 2002; Cress & Snow, 2000; King, Cornwall & Dahlin, 2005; Deng, 1997; Mcammon et al., 2007). Aside from these direct- and indirect effects, social movements can also result in unintended consequences (Soule & Olzak, 2004). These social movement studies usually emphasize their research focus on single causal factors, such as public opinion, social movement organizations, collective action, the political environment, or electoral competition. Studies that combine these key measures and track them over time or compare them through multiple relevant units concerning policy outcomes are lacking (Soule & Olzak, 2004).

Climate activists worldwide have also been using protests as a primary tool to promote their cause (Adedoyin et al., 2020). In the week from September 20 to September 29, 2019, the most significant global scaled climate change strikes and protests in history have occurred, also known as the Global Week for Future (Bugden, 2020). For clarification, strikes are a refusal to join work, usually resulting from a disagreement between employer and employee. Strikes are also considered a form of disobedience when they go against governmental regulations and rules. Protests ¹are a way to show disapproval on a specific issue, for example, in the form of a march. Approximately 6 million people worldwide participated in this Global week for Future (Taylor, Jonathan & Watts, 2019). On September 20, over four million people worldwide participated in climate strikes (Barclay & Resnick, 2019), including 2000 scientists from 40 countries (Conley, 2019). These strikes aimed to increase awareness and demand more decisive social- and political action to address climate change (De Moor et al., 2020). This movement started in late 2018 with Fridays for Future (FFF), also known as the School Strike for Climate movement. Students skipped Fridays classes to participate in a campaign that addresses climate change (FridaysForFuture, 2020). Two global strikes followed this up on March 15 and May 24, 2019 (BBC, 2019), eventually leading to a third global strike known as the Global Week for Future. These September strikes aimed to move beyond school children and broaden towards a more adult audience (De Moor et al., 2020).

In the Netherlands, multiple climate strikes in different cities across the country occurred in 2019. A part of society does not agree with the (lack of) measurements the government is taking to tackle climate change. This resulted in the first large school strike on February 7, attracting around 10.000 school students. On March 10, a national climate march took place, including about 40.000 participants (HetParool, 2019a). Moreover, on September 27 2019, a national climate protest was organized in the Hague, with an estimated 15.000-30.000 people participating (NOS, 2019). Besides these larger protests, there were also multiple smaller-scaled protests organized.

The impact of recent climate protests and how they have affected the social- and political arena is still unclear (Bugden, 2020). Especially in the Netherlands, the outcome of these protests on national policies and public opinion has not been researched before. As mentioned, over in 2019, dozens of climate protests have occurred, with hundreds to thousands of people participating. It was, however, not feasible within the time frame of this research to examine all of them. Therefore the focus lies on the largest and most prominent national protests. This research contributes to the body of literature on (climate) collective action outcomes in the form of protest, adding insights towards social movement theory and political process theory. It provides information on under which circumstances these climate protests are seen as influential. Step 1 of this research conducted an in-depth case study on if and how the series of climate protests between February and December 2019 affected national public opinion and climate policies. It focused on macro-level impacts, excluding the meso (communities) and micro (individual) levels. This research defines climate policies as measures that reduce sources of or enhance sinks of greenhouse gas (GHG) emissions (Pachauri et al., 2014). Step 2 of this research focused on explaining why the series of 2019 climate protests caused a (lack of) change in public opinion and national climate policy. It did by analyzing the protests on specific characteristics (explained in Chapter two of this research) that influence their effectiveness. The previous stated objective results in the following research question:

‘To what extent has the series of national climate change protests in 2019 affected climate policies in the Netherlands, and how can this be explained?’

¹ This research uses the term ‘protests’ as an overarching word for the previously mentioned forms of civil disobedience.

A set of sub-questions were created to answer the main research question and add additional value to the research:

1. What changes or developments in national climate policies have occurred during and after the 2019 climate protests?
2. What changes in national climate opinion have occurred during and after the 2019 climate protests?
3. How can these (lack of) changes in national climate policy and opinion through the 2019 climate protests?

Figure 1 presents the research framework that shows the steps that were taken to answer the research question. Step 1 starts with conducting literature research on the theories related to how collective action influences public opinion and climate policy. This literature research composes the conceptual and explained how the main concepts are measured. Step 2 is gathering empirical evidence on the selected case study through a document and media analysis. Step 3 is about implementing and describing the data found in step 2. Step 4 presents a more significant analysis of the different results and explains how these results interact and compared. Step 5 is about providing a conclusion at the end of the research and offers future research recommendations.

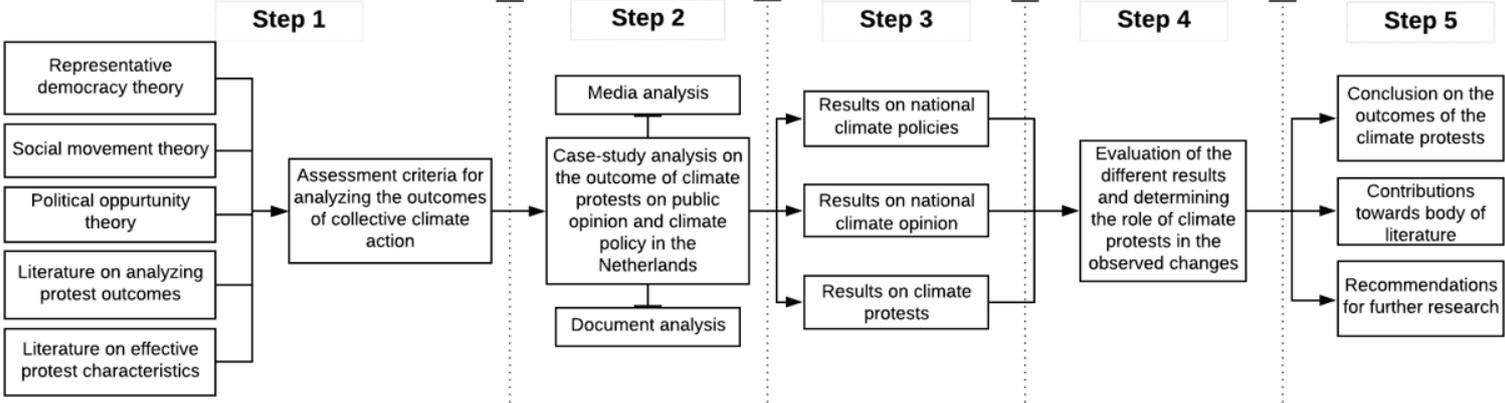


Figure 1 Research framework

2 Theoretical background

This chapter provides a literature review on the primary theories that are important to understand how collective action affects public opinion and policy. First, it looks into the theory of representative democracy. It is essential to understand the Dutch political arena and how democracy in the Netherlands is shaped. These democratic characteristics determine the link between public opinion, the political arena and the role climate movements play within this political structure. Additionally, it explains why political party support through voting polls can be used to indicate national climate opinion. It also explains briefly how policy positions of political parties can be measured, with a more detailed theoretical debate presented in appendix 1. Second, it provides information on how public opinion can be measured and examine existing literature on under what general conditions national climate opinion is influenced. Third, it provides information on social movement theory, showing through what streams social movements can cause a change in the status quo (here relating to climate policy). It also shows which factors social movements need to adhere to boost their level of effectiveness. Fourth, this subchapter dives deeper into the democratic and political opportunity structure. It provides an overview of the conditions under which climate movements can cause a change in public policy and opinion. At last, this chapter summarizes the most important theoretical insights and presents the operationalization of applied concepts.

2.1 Theory of representative democracy

The most common form of democracy in all modern western-style countries is that of representative democracy. This type of democracy is based on the principle where elected officials represent a group of people and their interests (Besley & Coate, 1997; Urbinati, 2006; Kölln, 2015). These representatives are usually part of a larger political party with strong beliefs on how the country should be governed. There is, however, a large diversity when it comes to electoral systems between different countries. Electoral systems determine how votes are cast and seats are allocated. The type of electoral system has significant consequences on the political system's operation. The same distribution of votes per party or person can result in different outcomes in the distribution of parliamentary seats (Lijphart, 1990; Gallagher & Mitchell, 2005; Morelli, 2004).

In the Netherlands, there is an electoral formula of proportional representation, meaning that political parties in the house of representatives (*Dutch: Tweede Kamer der Staten-Generaal*) are the exact or nearly exact proportion to the votes they polled (Blais & Massicotte, 1996). Another characteristic of the Netherlands is that it has a single national electoral district, which creates the most accurate form of representation through voting (Van Kessel, 2011; Blais & Massicotte, 1996). Together these factors make the possibility to link national public opinion to election outcomes, as these outcomes accurately represent the percentage of voters that support specific political parties and their policy positions. Knowing these national electoral characteristics is essential, as this determines to what extent social movements have the power to impact public opinion, election outcomes, and, therefore, policy change (Giugni, 2007).

Political parties play a vital role in implementing and developing climate policies needed to achieve international and national climate goals (Jensen & Spoon, 2011; Carter et al., 2018). The national government represented by the political parties should be seen as a major leverage point for social movements to influence policy effectively (Priest, 2016). Brulle et al. (2012), in research explaining shifts in public opinion on climate change threat in the US, concluded that the elite partisan battle of the issue is one of the most important factors influencing public opinion. This is in line with the argument noted by McDonald (2009) that the public follows up consensus among political elites. In the presence of a polarization (present in the Netherlands), citizens mainly rely on the beliefs of the

political party they support and other sources of credibility to form their opinion. This shows that political parties are not merely influenced by social movements and public opinion (Wlezien, 2017; Soule & Olzak, 2004) but also play their unique role in shaping public opinion (Carter et al., 2018)

The Dutch electoral system of proportional representation allows deriving public opinion from national voting behaviour and election outcomes (Van Kessel, 2011). However, determining a change in national climate opinion through voting behaviour first requires determining the climate policy positions of all parties seated in parliament². By determining the climate policy position of Dutch parties, it can be said to what extent an individual vote contributes towards national climate action. For example, a vote on the PVV is a vote on zero climate mitigation action, while a vote on the Partijvoor de Dieren is a vote for acute and intensive climate action. Longstanding voting polls can be applied to analyze a change in party support over a period of time, as they are a reliable form of documented data obtained through the same methodology on numerous occasions (Brooker & Schaefer, 2015). Analyzing the outcomes of these polls can show a trend in national support for specific political parties during and after the 2019 series of climate protests.

One way to determine the climate policy positions of political parties and make them applicable to show a trend in support for 'pro-climate parties' is by analyzing their party manifestos. Party manifestos, also known as election programs, refer to official strategic documents released by political parties and act as their core source of information to represent their political beliefs to the public. Analyzing these manifestos and deriving policy positions of these key actors is fundamental for the analysis of political competition (Laver & Garry, 2000). These manifestos are usually publicly available, provide the party's official policy preferences, and do not contain cheap talk (Carter et al., 2018). This makes them an ideal source to provide a clear overall picture of the party's general climate positions, and therefore indirectly indicate public support for these climate policy positions. During election times, parties will be more outspoken on salient issues, such as climate change. Consequently, it is an ideal timeslot to analyze the parties' and eventually their followers' position on climate action (Burstein & Linton, 2002). Using national support as an indicator for public climate opinion does come with the assumption that people supporting this party agree with the party's climate policy position. Appendix 1 (Determining climate policy positions through party manifestos) provides a more detailed literature review on the theoretical debate on how policy positions have been derived from a party's manifesto in the past. In this research analyzing the climate policy positions is a means to an end, which in this case is determining a shift in public opinion. Therefore, it was chosen not to include this theoretical debate on analyzing policy positions³ through manifestos in the main report as this wanders from the main focus points, the 2019 climate protests.

2.2 Public opinion

Public opinion can be measured through multiple streams. Brooker & Schaefer (2015) split the methods of learning public opinion into two classes: formal and informal methods. Formal methods are those derived by public opinion experts through definite research designs and formal research methodologies. These are methods well known and reliable to portray (when used correctly) national opinions. Examples of these formal methods are sample surveys (online, telephone), focus groups, and content analysis. Sample surveys are also known as "polling", where a certain part of society is asked about their opinion on specific issues. This is also highlighted by Berinsky (2017), who argues that national surveys are an excellent method to measure public opinion.

² 'Parliament' in this paper refers to the house of representatives or in Dutch: Tweede Kamer der Staten-Generaal

³ It should, however, be made clear that determining party's climate policy positions through party manifestos is a decent amount of work

Brooker & Schaefer (2015) consider surveys the most important way to learn about public opinion. When used correctly, e.g. through random sample methods and other characteristics, these polls provide high reliability with an overview of the total population's opinion (Gideon, 2012; Wilson, 1947). Examples of informal ways to measure public opinion are elections, interest groups and lobbying, the media, letters and calls, protests, and straw polls (Brooker & Schaefer, 2015). Elections are one of the most common ways for democratic governments to learn about public opinion (Brooker & Schaefer, 2015). Their precision is, however, related to the democratic system in place. A lower amount of representing parties in parliament and low polarization levels make public support harder to determine through election outcomes (Brooker & Schaefer, 2015). Ideally, public opinion is measured through a formal method, such as a survey or poll. However, other types of (informal) methods to determine public opinion can be applied when historical data is lacking.

2.2.1 Public climate opinion

Brulle et al. (2012) provide an empirical analysis of factors affecting public concerns of climate change at the US's aggregate (national) level. Their existing literature research ended up with five main factors accounting for changes in the level of concern. These are extreme weather events, public access to accurate scientific information, media coverage, elite cues, and movement- and countermovement advocacy. This time-series analysis by Brulle et al. (2012) indicated that political mobilization by elites and advocacy groups and structural economic factors have the largest effect on public climate concerns. In this case, Elite cues relate to political elites, their beliefs, and how they influence public concern. Their ideas are often spread through media and are therefore closely linked to media coverage. Individuals base their beliefs on what political parties, especially those they support, think about the issue (Brulle et al., 2012). This is in line with earlier findings presented in the theory of representative democracy, which also showed the critical relation between political parties and public opinion.

Media coverage is also found to be important. However, this coverage is primarily a function of the earlier mentioned elite cues and economic factors. This coverage is about how the media influences people's understanding, beliefs and opinions about a certain topic. The quantity of coverage theory shows that issue salience is increased by increased media coverage (Mazur, 2009). The amount of headlines on a specific topic influences people's belief on how important the presented issue is. However, Priest (2016) argues that if media coverage is present, but people are not confronted directly by the issue presented in the media, attention recedes, and the problem becomes less prominent to the public. In general, climate change does get a lot of attention, even in the Netherlands, where its 'visible' effects are minimal. How social movements have affected this media coverage and what extent the media have covered these climate protest in 2019 plays an important factor in determining their effect.

Movement and countermovement advocacy groups can influence public opinion through multiple streams. For example, the climate sceptic or denier movement aims to decrease support for climate mitigation measures by increasing doubt on the scientific consensus on climate change. These advocacy groups usually do this for their well-being, as they are generally negatively influenced by climate mitigation measures (e.g. fossil fuel companies) (Brulle et al., 2012). Weather extremes were not found to impact national opinion, and public access to accurate scientific information showed to have a minimal effect (Brulle et al., 2012). Therefore it is assumed that information-based science advocacy also has a minor effect. Roser-Renouf et al. (2014) also showed that merely communicating the simplified science of climate change proved to have little impact on public attitudes. Science literacy has only shown weak correlations with public attitudes toward the controversial issue of climate change.

2.3 Social movement theory (collective action and conflict)

Collective action mainly aims to challenge the legitimacy of the status quo and cause policy change (Louis, 2009). For example, the recent climate protests call into question the fairness of how society is currently treating its environment. People participate in protests because it causes a feeling of empowerment and utility. This empowerment relates to one's confidence and ability to challenge existing domination relations (Drury & Reicher, 2005). Protest participation received a great deal of research attention, with primary evidence showing that participating in collective action is motivated by social rewards, individual instrumental incentives, and the feeling of being part of a coherent group (Simon & Klandermans, 2001; Van Zomeren & Iyer, 2009; Van Stekelenburg & Klandermans, 2013).

Ulug & Acar (2018) mention three levels where change by social movements can happen. First is the individual level, where individuals challenge existing relations of domination and where individuals' politicization and empowerment increase (Drury & Reicher, 2000; Van Stekelenburg & Klandermans, 2013). Second, the group level, where social movements cause changes in intergroup relations (Reicher, 2011). And third, the system- or policy-level where political and social structures are changed (Louis, 2009). The latter is also where this research focuses, as it will examine the effects of the climate movement on both public opinion and policies on a national level.

Giugni (2007), in a research on policy impacts of social movements in the US, came with three explanations on how social movements impact policy. This explanation is based on the movement's role, the resources found in their environment, and the relation between the movements' mobilization and those resources. He put these explanations into three models: the direct-effect, indirect-effect, and joint-effect model. The direct-effect model maintains that social movements directly influence policy change in the absence of external support. The indirect-effect model states that social movements affect policy changes through a two-step process. Social movements first impact political allies or public opinion and then have these two cause policy changes. Finally, the joint-effect model maintains that social movement impacts occur when political allies and public opinion intervene with the movement's mobilization (Giugni, 2007). Giugni (2007) argues, based on earlier work by scholars on the interactive and contingent effects of social movements, the presence of opportunity structures, and other contextual factors, that the joined-effect model has the most explanatory power. Especially the presence of political allies within the institutional arena and a favourable public opinion are highlighted as crucial external factors to mobilize movements and facilitate policy impact (Giugni, 2007). This research agrees with Giugni's idea on the joint effect model being having the most explanatory power. This model is built upon the idea that for social movements to cause policy changes, they need to unite with political allies and a favourable public opinion. This model also includes the idea that these three factors together have the power to cause policy change and at the same time influence each other. Therefore, it was chosen to base the conceptual framework provided in figure 2 around this idea. It should be taken into account that there is also the possibility social movements have no impact at all (Giugni, 2007). This is because the political arena is intangibly larger, with many different factors influencing policy change. Therefore the policy change could be caused by something outside these three factors presented below.

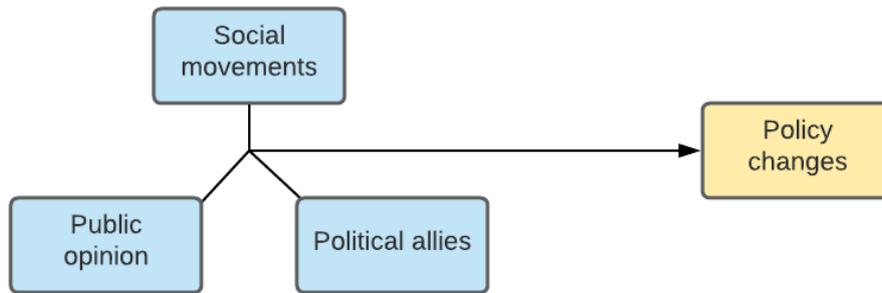


Figure 2 Conceptual framework, based on the joined-effect model by Giugni (2007)

2.4 Political opportunity theory

Political process theory (PPT), also known as political opportunity theory, explains the factors that make social movements successful in reaching their goals. According to this theory, a set of political opportunities for change must first be present for the movement to reach its targets. This theory is the dominant paradigm when it comes to social movement research (Caren, 2007).

According to Caren (2007), based on earlier work from founder McAdam and critiques on this theory from other social movement scholars, PPT has five elements that explain the rise and decline of social movements and when they cause change. These elements are political opportunities, mobilizing structures, framing processes, protests cycles and continuous repertoires (Caren, 2007). Political opportunities refer to a state where the political system is no longer seen as legitimate (by a relevant part of society) and vulnerable. Political opportunities reveal when leader divisions change, diversity within political bodies increase, and when repressive structures of political structures weaken (Caren, 2007). Mobilizing structures are “those collective vehicles, informal as well as formal, through which people mobilize and engage in collective action” (McAdam et al. 1996, p.3). Framing processes is about describing the issues the movement wants to address, why change is necessary, and how this change could be achieved. According to McAdam et al. (1996), with ‘framing’ movements want to achieve a shared understanding of the world and the legitimacy of its issues to motivate collective action. The next element is protests cycles, which play an important role in the success of social movements according to PPT and relate to the period where protests occur at a heightened state. These protests can raise general awareness of a problem, strengthen movement solidarity, and possibly attract new members (Caren, 2007). Contentious repertoires relate to the set of means through which social movements make claims (Crossman, 2019). Examples of these are strikes, petitions, and demonstrations. All five elements together create the possibility for social movements to cause a change in the status quo (Caren, 2007).

The effectiveness of climate movements can be enhanced by aligning themselves with the political opportunity structure (Meyer & Minkoff, 2004). This political opportunity structure relates to the external factors, such as specific political circumstances, power availability for relevant groups and political parties, available resources for mobilization, existing alliances, and how the legislative rule system is formed (Meyer & Minkoff, 2004). Priest (2016) highlights that social movements that want to cause change and increase their chances of success should take specific opportunity structures into account. Social movements should primarily aim for goals that fit within the political environment they are acting in.

Democratic and political opportunity theories maintain that election periods and partisan politics play a significant role in determining public policy, the development of social movements, and social movement outcomes (Agnone, 2007). Amenta et al. (2010), who researched the political consequences of social movements in the US, also highlights that different movement strategies will work at different levels of the policy cycle. Especially movements that apply electoral strategies and aim to influence electoral outcomes are found far more often influential and assertive in achieving policy change (Amenta et al., 2005). During election periods, political parties favourably represent themselves by adhering to public opinion by focusing on salient issues (Adams et al., 2004; Ginsberg, 1976; Burstein, 2003; Agnone, 2007). When parties are elected, and governmental agendas are set, it becomes harder for social movements to cause change (Amenta et al., 2010). The democratic process automatically makes it a natural habit for politicians to adhere to public opinion (Soule & Olzak, 2004). Running against the majority view, known as the dominant public opinion, will risk parties losing the election. Therefore, elected officials are pushed to enact policies consistent with public opinion during the electoral competition (Burstein & Linton, 2002).

2.5 Effective protests

There is no fixed list of organizational forms, strategies, or political context that will increase the effects caused by movements. Some of these factors will be more productive in one political context over the other (Amenta et al., 2010). This is also highlighted by Priest (2016), who argues there is no set of factors that make social movements more effective, as their effectiveness is highly context-specific. From a social identity perspective, collective action will only create change in the status system if it changes socio-structural beliefs or group identities (Louis, 2009). Movements affect these external conditions, which then influence policy changes (McAdam & Su, 2000; Kane, 2003; Soule et al., 1999). According to Louis (2009), who delineated research from political science and sociology concerning variables that moderate the effectiveness of collective action, four effective social change practices are derived from social identity theory. These create a larger shared identity, level of disruption, changing socio-cultural beliefs, and creating a new injunctive norm. The timing of the protests also plays an important role in the movement's effectiveness. This was highlighted through the theory of political opportunity. The other most prominent factors influencing the impact of social movement, and which have not been mentioned earlier, are discussed below.

2.5.1 Mobilization and magnitude

Mobilization is a key factor when it comes to the level of influence a social movement causes. An important part of mobilization is also the scale in which it takes place. The review of 54 articles on social movements by Amenta et al. (2010) showed that the larger the movement, the more effect. It showed a positive relation between movement size and the movement's ability to achieve its goals. The salience of a problem is increased as members of disadvantaged groups unite into one inclusive superordinate identity (Wohl, Branscombe & Klar, 2006). The larger the movement and support, the more the status quo will be seen as illegitimate (Hornsey et al., 2005). Louis (2009) argues that public policy is linked with public opinion polls, especially on salient issues seen as important by at least 1% of the population. Louis (2009) found through multiple streams that newly increased magnitudes and frequencies of collective action showed a higher chance of changing the status quo.

2.5.2 Issue framing

It is also important to see how the social movement has framed the issue. This is about framing the problem and framing how the movement sees to solve this problem. The movement has to provide credible targets and solutions that have to be minimally plausible and fitting within the present culture. If movements lack these solutions, the movement will have a lower impact (Amenta et al., 2010). The framing of these solutions must also fit within the ideas of existing policymakers. Another important

focus is who is responsible for tackling this problem (e.g. national governments, the EU, or individuals.) as this opinion relates to the creation of national climate policies. If the problem is framed in a way where nobody in the country believes that the national government is the one that should tackle this problem, no national climate policies would be created on this issue.

2.5.3 Political allies

For movements to be influential, state actors need to see this movement as facilitation or disruption of their own goals (Amenta et al., 2010). These political elites need to see the benefits of supporting this movement. Examples of these benefits are increasing public support, creating newly desired coalitions, or increasing support for their missions. If the larger political regime is supportive of these movements, it is also expected to have more influence (Amenta et al., 2010). The need for political allies was also explained earlier, in the theory of representative democracy, and by Giugni (2007) on the need for political allies to cause policy change.

2.5.4 Type of protest

When looking at social change outcomes due to collective action, disruptive protests are often more effective, as normative acts require bureaucratically organized activities to overcome powerful groups with more power and money to dismantle their efforts (Smith & Louis, 2008; Louis et al., 2005). Disruptive social action could create instability for advantaged group members, e.g. the government, moving them away from the status quo (Louis et al., 2004). Disruptive tactics usually gain more media attention, which is a crucial protest tool for movements seeking to increase public support (Chenoweth et al., 2011; Oliver & Myers, 1999; Andrews et al., 2016). Within the term 'disruptive protest', there is a scale of intensity. More extreme forms of protests that include vandalization are often seen as less effective. These protesters and their goals quickly lose support from the general public (Simpson et al., 2018). This results in a backfire effect, where the protest fails to reach its purpose and even makes the situation worse by turning the general public against them (Boudon, 2016; Hess & Martin, 2006). Also, violence during a protest is likely to lower public support, as this reduces the protest's perceived legitimacy and that of the associated movement (Feinberg et al., 2020; Chenoweth et al., 2011; Thomas & Louis, 2014). Disruptive protests can also cause people to link the specific protest they disapproved of and the problem they are trying to draw attention to (Boudon, 2016). This results in a negative outcome where the protesting organization is losing public support, but the issue that they are protesting for also loses support.

Different forms of activism try to influence the status quo. Outward-focused activism aims to communicate a message to mass society and increase pressure on political elites to take action (North, 2011). Direct action is a more aggressive form of activism, where expert groups (such as Extinction Rebellion) usually organize disruptive nonapproved types of protest, for example, blocking the highway (NOS, 2020). It is essential to determine what kind of activism is applied at the 2019 climate protests, as this can tell a great deal about why they caused or didn't cause change.

2.5.6 Changing socio-cultural beliefs

According to O'Brien et al. (2018), a failure in some forms of public dissent, especially disruptive forms, is the lack of offering viable alternatives to deal with the problem. People are complaining about the status quo but do not develop realistic alternatives to tackle these problems. The politicization of climate change by criticising the status quo can open spaces for new actors. However, at the same time, it can create a discourse of hostility and polarization, which limits mobilization (O'Brien et al., 2018). This increase in polarization can have a negative effect, as a we/them distribution is created, while these protests aim to create a coherent opinion on climate change. Therefore, merely giving

critique and not providing feasible solutions could have unintentional negative effects (O'Brien et al., 2018).

Changing beliefs through collective action could create conflicts between and within groups (Wright & Taylor, 1998). Climate protests could lead to a change in leading political parties' beliefs or leading individuals. These changes could then further develop into policy changes. Collective action could also result in a new injunctive norm, where perceptions of approved behaviour are changed (Smith & Louis, 2008). For example, the current idea of using fossil fuels as the primary energy source could become inappropriate and widely disapproved. In that case, the action changing these beliefs will lead to policy change. Socio-cultural beliefs also relate to the salience level of a problem. It is shown that governments are more responsive to issues with high salience (Adams et al., 2004; Gindsberg, 1976; Burstein, 2006). Therefore, it could be said that collective action that improves this saliency also increases the responsiveness of governments to take action (Louis, 2009). This is again also in line with framing issue framing, with social movements causing new beliefs through framing the problem differently. It is important to determine if the climate protests in 2019 influenced problem salience as also influences an increase of response from governmental actors.

2.6 Operationalization

The concepts of public opinion and climate policies first need to be conceptualized in order to be analyzed. Analyzing these changes is step 1 of this research. This research focuses on a change in national climate policies, determined through legislative activity. A change in national public opinion is determined through analyzing long-standing opinion polls made by others and the combination of repeated voting polls and the party's climate policy positions. A more detailed description of the concepts of climate policy and public opinion is provided in chapter 3. Step 2 of this research focuses on explaining the (lack of) change climate protests had on public opinion and national climate policies. The operationalization of the concepts that determine the effectiveness of the assessed climate protests can be seen in figure 3. These concepts of 'effective protests' are based on the theoretical insights provided above. Table 1 provides a summarized overview from the theoretical background on the factors used to explain the climate protest effectiveness, including the sources that stated that these were important factors. The factors 'presence of counter advocacy groups' and 'media coverage and framing' will not be analyzed in this report. As mentioned in the literature, these are important factors that determine social movements successes. However, the focus of this report lays the climate protests 2019, not the entire climate movement. Analyzing all counter advocacy groups of the climate movement would not fit within the time of this research. The same goes for determining how the media has framed this entire climate movement. It did, however, determine how the climate protests are portrayed in the Dutch media. This research aims to make a start in the explanation of why these climate protests caused (or did not cause) a change in public opinion and national climate policy. It will not determine the exact scale on which each factor influences the protests' outcome. Still, it will provide insights and recommendations where future research should aim to explain this outcome further.

Table 1 Factors that determine protests' effectiveness

Concept	Unit of analysis	Key literature
Effective climate movement	Timing	Election periods and partisan politics play a significant role in determining social movement outcomes (Agnone, 2007). ; Burstein & Linton (2002) highlight the importance of collective action around electoral-oriented activities, where the creation of swing voters is a key factor by which policy change occurs; It is shown that movements that influencing electoral outcomes (which comes even before the policy cycle), are often far more influential and assertive in achieving policy change (Amenta et al., 2005).
	Magnitude	The newly increase magnitude of collective action has a higher chance of changing the status quo (Louis, 2009).; The review of 54 articles on social movements by Amenta et al. (2010) showed that the larger the movement, the more effect.; The larger the movement and support, the larger the impact (Hornsey et al., 2005). It is shown that governments are more responsive to issues with high salience (Adams et al., 2004; Gindsberg, 1976; Burstein, 2006).
	Type of protest (Level of disruption)	disruptive protests are often more effective, as normative acts require bureaucratically organized activities to overcome powerful groups with more power and money to dismantle their efforts (Smith & Louis, 2008; Louis et al., 2005).; Disruptive tactics usually gain more media attention, which is a crucial protest tool for movements seeking to increase public support (Chenoweth et al., 2011; Oliver & Myers, 1999; Andrews et al., 2016).;
	Changing social-cultural beliefs	From a social identity perspective, collective action will only create change in the status system if it changes socio-structural beliefs or group identities (Louis, 2009).; Creating a new injunctive norm, perceptions of what behaviours are approved or disapproved by others cause a change in the status system (Louis, 2009).; The movement has to provide credible targets and solutions that have to be minimally plausible and fitting within the present culture. If movements lack these solutions, the movement will have a lower impact (Amenta et al., 2010).; Priest (2016) highlights that social movements that want to cause change and increase their chances of success should take specific opportunity structures into account. Especially aiming for

		goals that fit within the political environment they are acting in.
	Presence of political allies	The presence of political allies is crucial to mobilize movements and facilitate policy impact (Giugni, 2007).; For movements to be influential, state actors need to see this movement as a facilitation or disruption of their own goals (Amenta et al., 2010).;
	Presence of counter advocacy groups	Countermovement advocacy groups influence public opinion (Brulle et al.,2012). For example, the climate sceptic or denier movement aims to decrease support for climate mitigation measures by increasing doubt on the scientific consensus on climate change.
	Media coverage and framing	The quantity of coverage theory shows that issue salience is increased by increased media coverage (Mazur, 2009).; Issue salience is directly linked to media coverage (Brulle et al., 2012).;

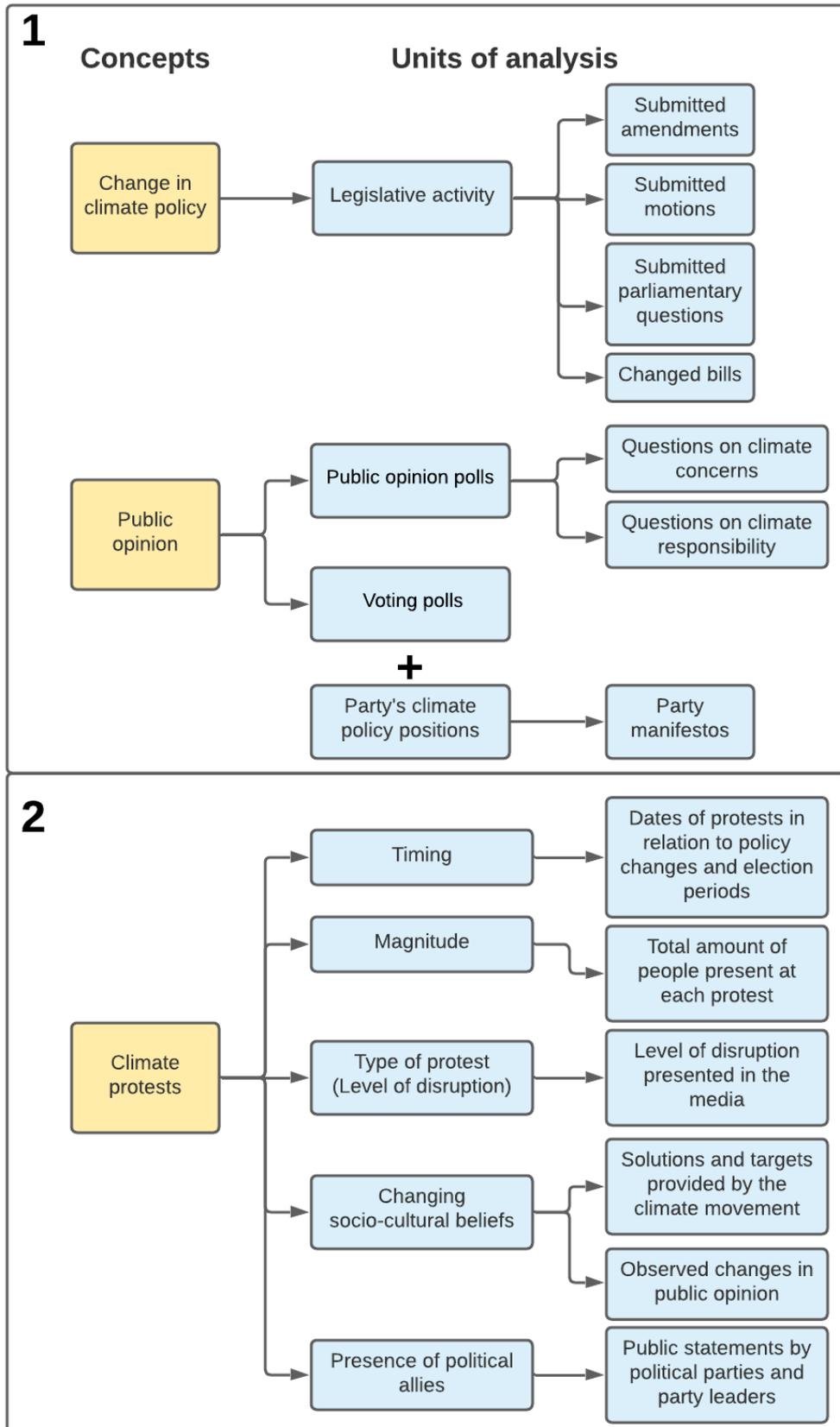


Figure 3 Operationalization of the researched concepts

3 Methodology

This chapter provides an overview of the chosen methodologies used to answer the research question. It starts with elaborating on the used research methods. It then explains which data sources are used to provide information on the researched concepts. At last, it describes how the party's climate policy positions were derived from their manifestos.

3.1 Research methods

The research presented here applied desk research as a qualitative research strategy to gather relevant material. Desk research is characterized by using existing literature and data compiled by others (Verschuren & Doorewaard, 2010). This research applied the gathered material from a different perspective than its source. The main reasoning behind this is that this research aimed to show a change that happened in the past. More specifically, it aimed to show a change in public opinion and national climate policies. This public opinion was gathered in relation to the 2019 climate protests. This research was not capable of determining national climate opinions in 2019 through its own empirical analysis. It had to rely on existing data on the public opinion provided by others. This research applied both literature and secondary data to answer its research questions. Literature is understood as the knowledge produced by social scientists in papers, articles, and books (Verschuren & Doorewaard, 2010). Literature was used to determine the set of factors that determine the effectiveness of climate protests. Literature was also used to explain the outcome of the secondary research analysis. Secondary research is understood as mean empirical data compiled by other researchers (Verschuren & Doorewaard, 2010). The forms of secondary data applied were opinion polls, voting polls, and news articles.

This research applied both a literature survey and secondary research. Through the literature review, it applied knowledge by others. The secondary research part of this report applies the empirical data provided by others. It rearranges existing data and both analyses and applies it from a different perspective (Verschuren & Doorewaard, 2019). This research uses empirical data on national climate opinion, voting behaviour, and the party's climate policy position and connects them to the 2019 climate protests. Doing so aimed to achieve a link between the 2019 climate protests and these analyzed factors. The used media articles are applied in the same manner. The information media articles provided, in combination with the literature review on what makes climate protests effective, created the opportunity to determine how effective the climate protests of 2019 were.

Survey data on climate public opinion polls were used as a form of data. Used surveys were analyzed on their number of research units, how data was generated, whether the sample was random or strategic, and the level of confidence that the survey is legitimate evidence (Verschuren & Doorewaard, 2010; Blasius & Thiessen, 2012). Therefore, the evidence needed to be examined thoroughly, especially its origins (Bazeley, 2009). In this case, the provider of the national opinion survey needed to be an un-bias party. Using a Bias survey can also be countered by looking into who was questioned and if this was a random sample survey or not (Beach & Pedersen, 2019). For these observations to be considered effective, it was analysed why they were conducted and by whom. In general, the researcher needs to stay critical and suspicious to make sure legitimate data is used (Beach & Pedersen, 2019).

3.1.1 case-study

This research provides an in-depth case study on the outcome of the 2019 climate protests on national climate policy and opinion in the Netherlands. It examined how these protests influenced these dependent variables and how these outcomes could be explained most sufficiently. It only looked at national implemented policies, not including those that implemented through a higher EU-level. The exact time when these policy documents and public opinion pools are originated is of high importance. This was carried out through a time-series research approach looking at multiple snapshots, where varying samples were taken to explain an outcome (Verschuren & Doorewaard, 2010). Public opinion was analyzed both prior to and after these protests. Changes or development of national climate policies were examined during and after the 2019 climate protests.

3.2 Data sources and processing the data

The data sources used in this research consisted of official government documents to determine a change in national climate opinion. Changes in or newly created climate policies (policy documents) were open data sources and accessible online in the examined period. Existing public opinion polls and voting polls were used to determine changes in public opinion a combination. These are all open data sources. A media analysis was performed to analyze the characteristics of the climate protests in 2019. An overview of all data sources applied to determine this change can be seen in table 2.

3.2.1 National climate policy

To show evidence of change in national climate policy, legislative activity and production were researched through the parliamentary record. The website of the house of representatives provides a database of different types of parliamentary records. This database automatically uses all verbs of the word that is entered. For example, searching for 'strike', also find 'strikes' 'striking'.. etc. This reduces the chance of missing documents due to wrong wording and therefore lowers errors. The chosen timeframe to research this database was equal to the time of researched climate protests from February 1 2019, to December 31 2019. With extra focus on February 2-13, March 5-15 and September 15 to October 2 2019, as the largest national climate protests took place within both these dates. The search terms used to find political data relevant to this research were "climate movement", "climate demonstration", "climate strike", "climate protest", "climate march", "energy transition", "greenhouse gas emissions", "fossil fuels", "environmental organizations". After searching the parliamentary record, the found documents were chosen based on their title. For example, when searching for "climate movement" it also adds all documents that mention these two words. Documents that popped up, but were not relevant for this research, were not read. In case of a too high number of search results (some searches resulted in more than 10.000 documents), additional search terms were applied or combined.

The list of parliamentary documents researched consists of amendments, parliamentary questions, motions, and bills. Each member of parliament has the possibility to make changes (to them considered improvements) to existing legislative proposals. These are officially known as amendments. Asking parliamentary questions is a procedure part of the democratic system present in the Netherlands, where members of the house of representatives ask questions to the government. Members of the parliament also have the right to submit a motion. Motions can be about different subjects, such as the confidence in the cabinet or a member of the government, reactions to new developments, more policy attention towards a certain subject, or the money distribution towards a certain policy. Motions are then be put to the vote, where each member of parliament has one vote. A bill (law proposal) can be initiated in two ways. Both the government and individual members of the House of Representatives have the option of submitting a bill. These bills are designed by civil servants

and commissioned by a minister. Members of parliament also have the possibility to submit bills, known as the right of initiative.

3.2.2 National climate opinion

Public opinion was measured through two indicators: existing public opinion polls and a combination of political voting polls and the party's climate policy positions. This is a combination of both a formal and informal method to measure public opinion, which was explained earlier (Brooker & Schaefer, 2015). It was chosen to apply both methods because merely the climate opinion polls would not be sufficient to determine a public opinion change. This was due to their lack of data and too few polling moments. To measure changes in public opinion through these polls, this research analysed a set of questions that have been repeated over time to show a valid changing curve. The (repeated) questions used in these public opinion polls, which this research focuses on, are general opinions on climate change concerns, questions on who is responsible for these concerns, and questions if the Dutch government should take more action to tackle the problem of climate change.

3.2.2.1 Climate opinion polls

The series of opinion polls is derived from the I&O Report: *Klimaat en het nieuwe kabinet*. This report was commissioned by Milieudefensie, an independent Dutch environmental organization. The results are weighted on gender, age, education, region and voting behaviour in the 2017 national elections to the House of Representatives. This makes the sample representative for Dutch citizens who are eligible to vote (18+). The weighing was carried out following the guidelines of the Gold Standard, a unique calibration tool for national and regional samples for representative sampling (Mansbridge, 2010). In this study, a reliability of 95% is assumed. The I&O Research Panel was recruited on the basis of a random person and household samples in the traditional way (no self-application), focusing on an adult population of 18 years and older. Also, people were not rewarded for entering the survey. These surveys present a confidence level of 95%, with an average sample survey of 1000 people. This means that if the entire population would have filled in this survey, at least 95% of the outcomes will be similar to the survey outcome.

Another set of climate polls is also one of I&O Research, derived from the report: *Hoe denkt de Nederlander nu over het klimaat?*. This report is commissioned by HUMAN, a socially-oriented media organization, in collaboration with Milieudefensie. It aims to find out how the Dutch think about the climate, their behaviour, and how this has developed over time. I&O Research conducted a nationally representative survey among 1,756 Dutch people aged 18 and older. The results are weighted on gender, age, education, region and voting behaviour in the elections to the House of Representatives in 2017. The questions in this report are quite similar to the questions asked in the other I&O report. However, these questions were asked through a different survey at different points in time. This makes it still valuable information. This report used the same research method as the other report. Both reports show a trend in answers to the questions, dating back to 2015. This shows that certain questions in this report have been asked on multiple occasions through time, showing a trend in public opinion. On both occasions, when these questions were asked, the organizations that commissioned the research were in no way named.

The third series of opinion polls used in this research are those of the European Commission. This so-called Eurobarometer is the European Commission's polling instrument, European parliament, and European institutions to monitor public opinion on certain issues. It also maps attitudes on subjects of political or social nature (European Union, n.d.). These surveys apply several interview methods such as face-to-face interviews, telephone, and online surveys. Participants are selected through a random sampling method. The sample size of these surveys is approximately 1000 persons over the age of 15. The surveys applied in the Eurobarometer also have a confidence level of 95%. The European Commission provides specific Eurobarometer surveys on climate opinion, being Special Eurobarometer 459, 468, 490, and 501. In these polls, Dutch citizens are asked about their perceptions of climate change and how action should be taken (European Commission, 2017). This survey is repeated every two years.

3.2.2.2 Voting polls

This research applied the voting polls of the four most used poll agencies in the Netherlands, which are I&O Research, IPSOS, De Peiling, and Kantar Public. The polls presented by these agencies with years of experience and are based on a representative sample. Their polls are a good reflection of the total population from which it was drawn. This research applied data from all four polling agencies to reduce discrimination between different polling data. This reduces the error of showing a change in voting behaviour solely based on one voting poll. I&O Research is an irregular voting poll with recruitment based on random persons and household samples. The respondents did not receive any financial compensation for their registration or for participating in this study. The IPSOS political barometer is a biweekly poll through an online survey. Increasing polls are done in the run-up to the elections. In addition, an ongoing telephone survey is carried out randomly among 100 Dutch people. The telephone survey serves as a correction mechanism for the online survey. The Peiling political poll is based on minimally 3000 respondents and held every Sunday. During election times, the amount of polls is increased. Participants are selected based on a number of personal characteristics, such as voting behaviour in the previous election. Everyone can join these polls. However, for the end results, only those selected beforehand are counted. Kantar public also performs irregular voting polls. There is a 'weekly' poll where around 1000 representative people are asked which party they will vote on if today would be an election. This poll also uses weighting to increase sample reliability. For example, in the group of respondents, attention is paid to the distribution between men and women and to the age distribution.

Table 2 Applied data sources on national climate policy and public opinion

Concept	Unit of analysis	Search terms/research institute	Source
National climate policy	Parliamentary record: <ul style="list-style-type: none"> • Amendments • Parliamentary questions • Motions • Bills 	“climate movement”, “climate demonstration”, “climate strike”, “climate protest”, “energy transition”, “greenhouse gas emissions”, “fossil fuels”, “environmental organizations”	https://www.tweedekamer.nl/kamerstukken?pk_campaign=breadcrumb
Concept	Unit of analysis	Research institute	Source
Public opinion	Existing public opinion polls	I&O Report: <i>Klimaat en het nieuwe kabinet</i>	https://www.binnenlandsbestuur.nl/Uploads/2021/1/io-research-rapport-voor-milieudefensie-klimaat-en-nieuwe-kabinet.pdf
		I&O Report: <i>Hoe denkt de Nederlander nu over het klimaat?</i>	https://www.ioresearch.nl/wp-content/uploads/2019/11/BMILHUM_klimaat_def.pdf
		Special Eurobarometer 459	https://europa.eu/eurobarometer/surveys/detail/2140
		Special Eurobarometer 468	https://europa.eu/eurobarometer/surveys/detail/2156
		Special Eurobarometer 490	https://europa.eu/eurobarometer/surveys/detail/2212
		Special Eurobarometer 501	https://europa.eu/eurobarometer/surveys/detail/2257
	Voting polls	I&O Research	https://www.ioresearch.nl/actueel/?c=17
		IPSOS	https://www.ipsos.com/nl-nl/news-and-polls/news
		De Peiling	https://home.noties.nl/peil/wekelijkse-stemming/
		Kantar Public	https://www.kantar.com/nl/inspiratie

3.2.2.3 Party’s climate policy positions

As mentioned, this research combined existing voting polls with the party’s climate policy positions to show a trend in public opinion on climate change. The party manifestos are derived from the party’s official websites. It will include all parties present in parliament during the 2019 climate protests and present in the voting polls.

This research applied a coding methodology to determine Dutch Party’s climate policy positions. The coding scheme applied in this research, mainly derived from Carter et al. (2018), is split up into two main categories: pro-climate and anti-climate. Pro-climate content indicates support for policies that reduce GHG emissions or enhance GHG sinks. Anti-climate content indicates support for policies that increase GHG emissions or decrease GHG sinks. Two specific coding categories were added to the anti-climate policy list of Carter et al. (2018), which acknowledged the climate crisis and climate denialism. These were important codes due to the polarization on assessing climate issues in Dutch political parties. The applied codes and subcodes can be seen in table 3. The entire list of codes and their descriptions, the specific coding steps taken, and the total outcome of codes linked to each party manifesto are seen in appendix 2. This appendix also provides an example sheet on coded data and a detailed overview of the coding steps.

The coding categories exist of core and non-core categories. The non-core categories refer to issues that are not directly related to GHG emissions, such as improving the waste cycle, favouring intensive agriculture, or explicitly favouring economic growth over environmental welfare (the latter two are seen as anti-climate, the first being pro-climate). However, party manifestos are not merely a list of climate policy proposals (Werner et al., 2011). Large parts of these manifestos are about expressing the party's attitude towards certain issues. Therefore indications of support for climate policies (or indications of attitudes against climate policies) are also coded as pro/anti-climate content.

Within this coding scheme, the observation unit is quasi-sentences – *“the verbal expression of a political idea or issue. In its simplest form, a sentence is the basic unit of meaning”* (Werner et al., 2011: p.5). This is in line with the Manifesto Coding Instructions (4th edition) provided by the manifesto research group (MRG) (Werner et al., 2011). To determine if quasi-sentence is considered pro or anti, it is also important to know country-specific contexts to code the manifestos. For example, when the country's main energy system runs on coal, going to gas is seen as a pro-climate policy. But when the country runs partly on renewables and parties suggest going back to gas, it is considered an anti-climate policy.

This research applied a qualitative analysis of the party manifestos and bases the rankings on the party's general statement and climate policies in their manifesto. Calculating the exact impact on GHG emissions of one policy over another is outside the scope of this research. It will focus specifically on national climate policies, excluding the party's beliefs on international or European climate policies (unless these policies also influence national measures). New codes were added during the coding process when certain policy positions were repeated across multiple manifestos and not part of the original coding scheme. These were policies aimed to decrease meat consumption and parties mentioning specific climate targets or support for climate agreements.

After coding the party manifestos and determining Dutch political parties' general climate policy positions, they were categorized based on their level of pro or anti-climate policy position. This ranking is based on the party's pro-climate and anti-climate policy position and a ranking of parties supporting national emission targets. It goes from ++/+/0/-/-, with '++' being the parties that stand out in their climate policy position, being pro-climate, and '- -' being the parties against (all) forms of climate mitigation measures. After this was done, these policy positions were combined with the voting polls mentioned earlier. This showed a trend in support for pro-and anti-climate parties before, during, and after the assessed climate protests.

Table 3 Climate policy coding scheme, authors elaboration on the source Carter et al., 2018

Concept	Codes	Subcodes	
Pro-climate policy	Acknowledging the climate crisis		
	Pro-carbon sinks		
	Pro-climate taxes and subsidies		
	Pro-energy efficiency		
	Pro-environment		
	Pro-lower carbon energy		
	Pro-lower carbon transport		
	Pro-other climate policies		Pro-lowering meat consumption
			Specific (pro) climate targets or support for national and European climate targets
		(PRO non-core) Agriculture	
		(PRO non-core) Anti-growth	
	(PRO non-core) Waste		
Anti-climate policy	Climate denialism		
	Anti-carbon sinks		
	Anti-climate taxes and subsidies		
	Pro-aerospace and shipping industry		
	Pro-fossil fuels		
	Anti-other climate policies		Anti-lowering meat consumption
			Anti-national and European climate agreements, climate mitigation policies, or emissions reduction targets
		(ANTI- non core) Agriculture	
		(ANTI- non core) Anti-regulation	
	(ANTI- non core) Pro-growth		

3.2.3 Assessing the climate protests

The units of analysis presented in the conceptual framework have been used to explain the (lack of) effect the climate protests had on public opinion and national climate policies. A media analysis was performed to determine the timing, magnitude, presence of counter advocacy groups, and type of protest (level of disruption). Each of the units of analysis is based on multiple news articles from different sources to increase the credibility of the made argument. The amount of media articles applied per protest was based on availability, as not all protests were equally represented in the media. The total list of applied media articles to make this analysis can be found in Appendix 4. Magnitudes are both reported in the news articles and reported through the main organizations that lead these protests. The type of protests, also known as the level of disruption, is also reflected through media. The used media sources are based on an online Reach survey of the United Internet Operators (VINEX), which showed that these media platforms have the largest public reach in the Netherlands (Jong,

2020). The factor of changing socio-cultural beliefs consists of a change in public opinion and if the movement provides feasible targets and solutions. Showing a change in public opinion is analyzed in step 1 of this research. To see if the movement provided feasible targets and solutions, the movement's main organizers were analyzed. The presence of political allies was analyzed through a Twitter analysis of both the Twitter accounts from the political parties and the party leaders. These accounts were analyzed between February 2nd and December 3rd 2019, as between these dates, all analyzed climate protests and strikes occurred. Also, a general google search was performed to find additional connections between the political parties and the 2019 climate protests. Table 3 provides an overview of all the data sources used to determine the protests' characteristics.

Table 3 Applied data sources on protests' characteristics

Concept	Unit of analysis		Source	Search terms	URL
Climate movement	Timing		NOS; AD; NU.nl; De Telegraaf; Google search	"climate movement", "climate demonstration", "climate strike", "climate protest", "environmental organizations" → Including the dates of these protests.	https://nos.nl/nieuws/archief/ ; https://www.nu.nl/archief/ ; https://www.ad.nl/ ; https://www.telegraaf.nl/archief/ ; https://www.Google.nl/
	Magnitude				
	Type of protest				
	Changing socio-cultural beliefs	Feasible targets and solutions	Analyzing protest goals through media and the goals that main protest organizers provide		https://www.greenpeace.org/nl/ ; https://fridaysforfuture.org/ ; https://www.youthforclimate.nl/ ;
		Public opinion	-	-	-
	Presence of political allies			Twitter;	-
		Google	"Party's name" + "climate movement", "climate demonstration", "climate strike", "climate protest", "environmental organizations"	https://www.Google.nl/	

4 Results

At first, the results of step 1 of this research are presented. Step 1 shows if there was a change in national climate policy between February and December 2019. It also analysis if this change is in any way directly connected to the series of climate protests. Step 2 provides a media analysis of the 2019 climate protests to determine their characteristics. The characteristics analyzed are those retrieved from the literature that determines the effectiveness of social movements and protests.

4.1 Changes or development in national climate policies

The parliamentary record was analyzed between February and December 2019, as this timeslot equals that of the climate protests. The applied search terms can be found in table 3.

4.1.1 Amendments

The amendments linked to climate policies and considered interesting towards the general discussion on climate action provided in this research are shown in table 4. For the amendment to be accepted, a total of 76 pro votes (the majority of parliament) had to be obtained. The same goes for the motions and bills presented later in this research.

Table 4 Amendments

Nr.	Date	File nr.	Amendment	Accepted
1	7/5/2019	35123-14	Amendment by Member Futselaar on excluding financing to the fossil fuel industry	No
2	1/7/2019	35167-18	Amendment by Member Van der Lee on the earlier start of the ban	No
3	17/10/2019	35300-XII-14	Amendment by members Paternotte and Remco Dijkstra on the further development of electrification in the aviation sector	Yes
4	12/11/2019	35304-12	Amendment by members Wilders and Edgar Mulder on reducing the yield of sustainable energy storage	No

The first amendment is about Invest-NL, a private company financed with public funds that are active in the commercial market. This Dutch Investment Agency (Invest-NL) aims to make the Netherlands more sustainable and innovative. The Dutch Ministry of Finance is a shareholder of this company. Member Futselaar submitted an amendment stating that investments in the fossil fuel industry are entirely excluded from Invest-NL's investment portfolio. The parliament, however, denied this amendment. Only the parties GL, SP, PvdD, and DENK voted in favour of this amendment.

Number two on the amendment list is about the earlier start of the ban on coal-fired power stations. The present law stipulates that all Dutch coal-fired power stations close by 2024, with the Hemweg power station closing in 2020. However, to reach the Urgenda verdict (requiring the government to meet an emissions goal of 25% reduction from 1990 levels by 2020), the coal-fired power stations need to be closed sooner. This amendment proposed closing all coal-fired power stations in January 2020 (instead of 2024) to reach climate goals. Closing these coal-fired power stations will result in a national emission reduction of 9Mton CO₂ in 2020, 11 Mton in 2025 and 9Mton in 2029 (Rooijers et al., 2019). Calculations regarding this amendment showed that it was feasible in regards to the total energy demand. This amendment also proposed postponing the closing of coal-fired power stations to December 2020 to ensure safe electricity security. The reason why these coal stations are not closing sooner is that this would increase the energy import. Therefore national production goes down, but foreign production goes up, moving the problem elsewhere. This

amendment was, however, not accepted by the parliament (second room). GroenLinks, SP, PvdA, and PvdD voted in favor of the amendment. The rest was against it.

Number three in the list provides that in 2020 and 2021, a total amount of 1 million euros will be released to develop further the electrification of the aviation sector in the Netherlands. Innovation in the international aviation sector is accelerating, focusing on cleaner, more economical and quieter aircraft. All parties except for PVV and FvD agreed on this amendment.

The last Amendment, by members Wilders and Mulder, wants to change the national climate agreement. They propose to lower the number of investments in the sustainable energy sector. The parliament did not accept this amendment. Only the PVV and FvD were in favour of this amendment.

The outcome of the first amendment, which was not accepted, showed that most parties in parliament still support Invest-NL's portfolio, which includes investments in the fossil fuel industry. This shows that some parties support reducing the investments in fossil fuels on a faster pace. The majority of parliament also declined the second amendment. This shows that most parties have no support for urgent and drastic climate action to reach the Urgenda emission target still. The third amendment did show support for more sustainable growth in the aviation sector. This is important as it is also one of the leading climate topics discussed by parties in their manifestos. This shows coherence between all parties in parliament (except for the full anti-climate parties PVV and FvD) on making the aviation sector more sustainable. Looking at all amendments from the parliamentary record, including those not presented in table 4, no direct link was found between the climate protests and amendments. None of the amendments mentioned the climate protests anywhere in their argumentation. There were no references made towards the climate protests, -strikes, or -movements.

4.1.2 Parliamentary questions

Three instances of parliamentary questions were linked to climate policies and considered interesting towards the general discussion on climate action provided in this research. They are provided below.

The first document includes Van Raan and Van Kooten-Arissen (Party for the animals) questions to the Ministers of Economic Affairs and Climate, Interior Affairs and Kingdom Relations and the Ministry of Foreign Affairs about the reports several foreign cities have proclaimed a climate emergency. These questions were sent on February 25 2019 and answered on March 19, 2019. For context, these climate emergencies were declared in other cities partly due to climate demonstrations (Rhyn & Gerny, 2019; National Post, 2019). The asked questions were about how Dutch municipalities, water boards, and provinces could be helped by accelerating climate action. They also asked if the declaration of a climate emergency in the Netherlands would help reach the Urgenda target. The response was that currently, there are no rules in Dutch law about the declaration of a climate emergency, and therefore it would only have a symbolic meaning. Also, the government is working out various possible measures to achieve additional CO₂ reductions in 2020 to reach the Urgenda verdict. The government wants to make a thorough assessment that does justice to both the execution of the judgement and the possible negative consequences of the measures. The government aims to present a package of measures in April 2019. Declaring a climate emergency before that will, according to both ministers, not impact this package of measures.

On October 15 2019, there were questions asked by member Ouwehand (PvdD) to the Minister of Justice and Security about maintaining the rule of law during actions by farmers and climate protesters. Ouwehand specifically focuses on the differences made between the climate and farmer protests regarding maintaining the law while keeping the right to demonstrate. Ouwehand argues that there were major differences in the regulation of these protests, where the farmer protests were less

controlled and the climate protests being more obstructed by law enforcement. For example, the climate protesters on September 27 2019 (35.000 participants in the Hague) were forced to walk a decimated round so the protest would not hinder the shopping and 'non-attending public. On the other hand, the farmer protests were, according to Ouwehand, more obstructive than the climate protests (as tractors rode over the highway towards the parliament in the Hague). The farmer protest blocked major highways and hindered people all around the country. Ouwehand highlights the differences made around law enforcement between the farmer protests and climate protests, stating that the right to demonstrate differs between these subjects in the Netherlands. At which the farmer protests more are tolerated, and more lenient law enforcement action is taken against the climate protesters.

The differences between farmer protests and climate protests are again highlighted in December 2019 in a letter towards the minister of Justice and Security by members Wassenberg and Van Raan (PvdD). In this manner, a peaceful climate protest on airport Schiphol organized by Greenpeace on December 14 2019, was forcibly ended by the police. The municipality did not approve of this protest. However, neither were the farmer protests which also caused disruptions. This letter showed significant differences between enforcing legislation against climate protests and the farmer protesters.

The minister of Justice and Security explained both of these instances. This minister replied that in both cases, the municipality is in the lead and made decisions that seemed appropriate at the time.

In the first set of questions, ministers declared that the declaration of a climate emergency in the Netherlands would only be symbolic and that no legal measures are currently connected to it. Regarding the second question, the minister of climate does say here that they believe that declaring a state of climate emergency will not affect climate measures the government is taking. However, the protests are closely linked towards a 'climate emergency, as this is one of the main messages that the climate protesters are drawing attention to. GroenLinks, one of the most pro-climate parties in the Dutch parliament, has been calling for a climate emergency for several years (GroenLinks, 2021). However, the exact effects of a climate emergency declaration in the Netherlands are unclear. The climate emergency questions were sent in after the large climate strike on February 7 and answered after the largest national climate protest on March 10. Many people in both these protests demanded that the Netherlands declared a climate emergency. However, as shown, the minister of climate does not agree that this is necessary or beneficial, not even after the 2019 climate protests. Therefore it can be said that the climate protests had no positive effect on this declaration.

The European parliament has already declared a climate emergency. In the run-up to the COP25 of the UN Climate Change Conference in Madrid from December 2-13, 2019, the European Parliament declared a symbolic climate and environmental emergency in Europe and worldwide (European Parliament, 2019). This EU declaration does show that one of the things the climate protests 2019 were demanding (a climate emergency) did go through on another level. However, it is only a symbolic emergency, but this could still impact the speed at which countries will implement climate mitigation measures.

The second set of questions were focusing on the differences made between the farmer and climate protests. Ouwehand, Wassenberg and van Raan highlighted these essential differences. The explanation by the minister of Justice and Security disagrees with the statements made by these parliament members. It directed them to the municipality, stating that this seemed appropriate at the time. This does, however, not mean that the difference represented here are not wrong. There is no

way to prove that there was a structural difference made between these two protests or that it actually was an appropriate measure taken at the time. This should be further investigated, making a comparison between police actions used in different types of protests.

4.1.3 Motions

The list of motions linked to climate policies and considered interesting towards the general discussion on climate action provided in this research is shown in the table 5.

Table 5 Motions

Nr.	Date	File nr.	Amendment	Accepted
1	11/3/2020 20/11/2019 12/6/2019 15/11/2018 8/11/2018	35300-XIII-22	Motion by Member Kops on the immediate abolition of ODE and SDE	No
2	13/11/2019	35302-57	Motion by member Van Raan about giving priority to CO2 reduction	No
3	20/11/2019	35300-XIII-24	Motion by members Kops and Wilders about immediately leaving the Paris Climate Agreement	No
4	14/3/2019	32813-313	Motion by Member Asscher et al. about involving the environmental organizations and the trade union movement	Yes

The ODE, like the Regulating Energy Tax (REB), is a tax on your gas and electricity consumption. The money from the ODE is used to boost the production of sustainable energy. This is accomplished through the Stimulating Sustainable Energy Production (SDE+) subsidy program. The first mentioned motion has been submitted multiple times over time. This motion is directly against all developments of sustainable energy sources. It has, however, always been declined by every party except for the PVV and FvD.

The second motion about the 2019 Climate and Energy Outlook shows that the Dutch CO2 reduction is significantly disappointing, partly due to high economic growth. Policies aimed at economic growth without the decoupling between growth and CO2 emissions will, by definition, lead to more CO2 emissions. This motion calls on the government to prioritize reducing CO2 emissions above the realization of economic growth, at least as long as growth and CO2 emissions are not decoupled. The only two parties supporting this motion were GroenLinks and PvdD, which are considered the most 'green' parties in parliament. The rest voted against it.

The third motion on immediately leaving the Paris Climate Agreement was only voted for by the PVV and FvD, both being climate crisis denying parties. The rest of parliament did not support this motion, showing support for the Paris Agreement.

The fourth motion calls on the government to involve trade unions and environmental organizations in the further elaboration of the measures presented in the climate agreement. Environmental organizations also play a large role when it comes to climate protests. The motion showed that the lack of a carbon tax and employment plans was why these two parties do not support the climate agreement. All parties supported this motion except for the PVV, FvD, and VVD, and therefore accepted.

The first motion shows large support towards the ODE and SDE. The second motion showed that most parties do not place climate action over an increase in economic growth. The third motion showed that all parties except the PVV and FvD do not want to step out of the Paris Agreement. The fourth motion provided an interesting outcome which showed that the larger part of parliament supports the involvement of environmental organizations in the elaboration of national climate measures. This is interesting because these same environmental organisations are also main organizers of several climate protests in 2019. Their exact involvement in these protests is explained later on. Looking at all motions presented between February and December 2019, no direct link was found towards the climate protests.

4.1.4 Bills

The bill linked to climate policies and considered interesting towards the general discussion on climate action provided in this research is shown in table 6.

Table 6 Bills

Nr.	Date	File nr.	Amendment	Accepted
1	17/9/2019	35304	Tax Measures Climate Agreement Act	Yes

There have been multiple changes in the Ministry of Economic Affairs and Climate (XIII) budget statements for 2019 and 2020. However, these changes showed no link towards the climate protests.

One bill about the tax measures for the climate agreement is interesting for this research. This third proposal of the six proposals from the Tax Plan 2020 package concerns tax measures in the year 2020 and later for implementing the Climate Agreement. It concerns, among other things, tax measures to encourage zero-emission driving, an increase in the motor vehicle tax on delivery vans, an increase in the excise duty on diesel, an increase in the energy tax on natural gas, a reduction in the energy tax on electricity, an adjustment of the rates of the Renewable Energy Storage Act (ODE), and an increase in the tax credit (tax reduction) in the energy tax. This bill was accepted by the parliament, showing support towards these measurements. This bill was accepted in between the different climate protests. However, no link to them was found. Additionally, no links were found between new bills, or new bill proposals, and the climate protests.

4.1.5 National Climate Agreement

Information on the national climate agreement and climate act are not derived from the parliamentary record. The climate agreement and climate act are both parts of the Dutch climate policy. Therefore they were further examined, including their development. The development and time of these developments are important to determine a possible relationship with the 2019 climate protests.

The national Climate Agreement is part of the Dutch climate policy. It is an agreement between many organizations and companies in the Netherlands to combat global warming and includes over 600 measures separated over four ministries. The climate agreement's goal is to reduce GHG emissions by 49% in 2030 and 95% by 2050.

The proposal for the outline of the climate agreement was first presented in July 2018. This proposal only included the main lines in which the climate agreement wanted to go. It did not include detailed measures the parliament was planned on taking. This proposal for outlines of the climate agreement was analyzed by Planbureau voor de Leefomgeving (PBL), the national institute for strategic policy analysis in the field of environment, nature, and space. The researches presented by PBL are solicited

and unsolicited, independent and scientifically founded (PBL, n.d.). The analysis by PBL showed that the measures presented in this outline have the technical potential to meet the emission reduction target of 49% by 2030 (PBL, 2018). However, as also highlighted by PBL, the technical specifications behind the proposed measures are only briefly elaborated. Therefore PBL is not yet able to provide a clear and exact overview of what effects can be expected from these measures.

On December 21 2018, the new draft of the climate agreement was presented to the parliament. This new draft was on March 13 2019, again analyzed by PBL. PBL showed that the proposed set of instruments presented in this version of the national climate agreement would not reach the climate targets set for 2030 and 2050 (PBL, 2019a).

Regarding the calculation made by PBL on the draft from December 2018, the cabinet announced (also on March 13 2019) that a CO₂-tax on the industry will be added to the national climate agreement. This idea of implementing a climate tax at the industry level is not something new. Because in February 2018, the PricewaterhouseCoopers Advisory N.V. (PwC) performed on behalf of the Ministry of Economic Affairs and Climate research that showed the effects of a national tax on greenhouse gas in the industry sector (PwC, 2019).

The official and final version of the national climate agreement was presented and implemented on June 28 2019. On November 1 2019, PBL also presented their analysis on this final climate agreement. Again, they showed that the measures provided in this agreement were insufficient to reach the GHG reduction goal of 49% in 2030.

The first large climate strike examined is that of February 7 2019. This protest was after the publication of the outline of the climate agreement. This outline was, according to PBL, plausible to reach the GHG reduction targets. The first draft of the total climate agreement, including its detailed measures, was presented on December 21 2018. This was also prior to the climate strike on February 7. The largest national climate protests occurred on March 10. Both the climate strike and climate protest were prior to the analysis PBL performed and published on March 10, which showed that the climate agreement was insufficient in reaching its goals. However, as will be shown later in this research, both the climate strike on February 7 and the climate protest on March 10 had 'including an industrial climate tax' as one of their main demands. This policy measure was later implemented into the climate agreement on March 13. This shows that one of the main demands, by both the strike on February 7 and the protest on March 10, was fulfilled. However, the parliament only included this measure after PBL published their assessment. The parliament itself also stated that this assessment by PBL was the reason for including this CO₂ tax. It can be said that the protest and strike were successful in reaching their goal. To what extent their climate action contributed to this implementation is unclear as it was also shown that the idea of an industrial climate tax had been around for years. Additionally, this tax is also one of the measurements that the party GroenLinks is trying to implement for several years (GroenLinks, 2019).

4.1.6 Climate act

The climate act is a legally binding law that states that the Netherlands should reduce their GHG emissions by 49% in 2030 and 95% in 2050 compared to 1990 levels. The Climate Act provides the legal framework in which an assurance cycle is established to obtain these goals. This act was first proposed in September 2016. Achieving the goals set in this act is done accordingly the climate plan 2021-2030, which published by the ministry of economic affairs and climate. This plan contains the main points of the government's policy actions to achieve these emission objectives. The climate act was accepted on December 20 2018, and entered July 2019.

4.2 National climate opinion

4.2.1 Public opinion polls

I&O Reports

The following opinion poll was derived from the I&O Research report 'Klimaat en het nieuwe kabinet' (I&O Research, 2021). The first question, which I&O repeated on multiple occasions, regards people's general concern for the emission of greenhouse gasses, climate change, and its effects on the environment. The question was presented on a scale from very concerned to no concerns at all. The outcome of these polls can be seen in figure 4. The black dots represent the time where the major climate protests took place.

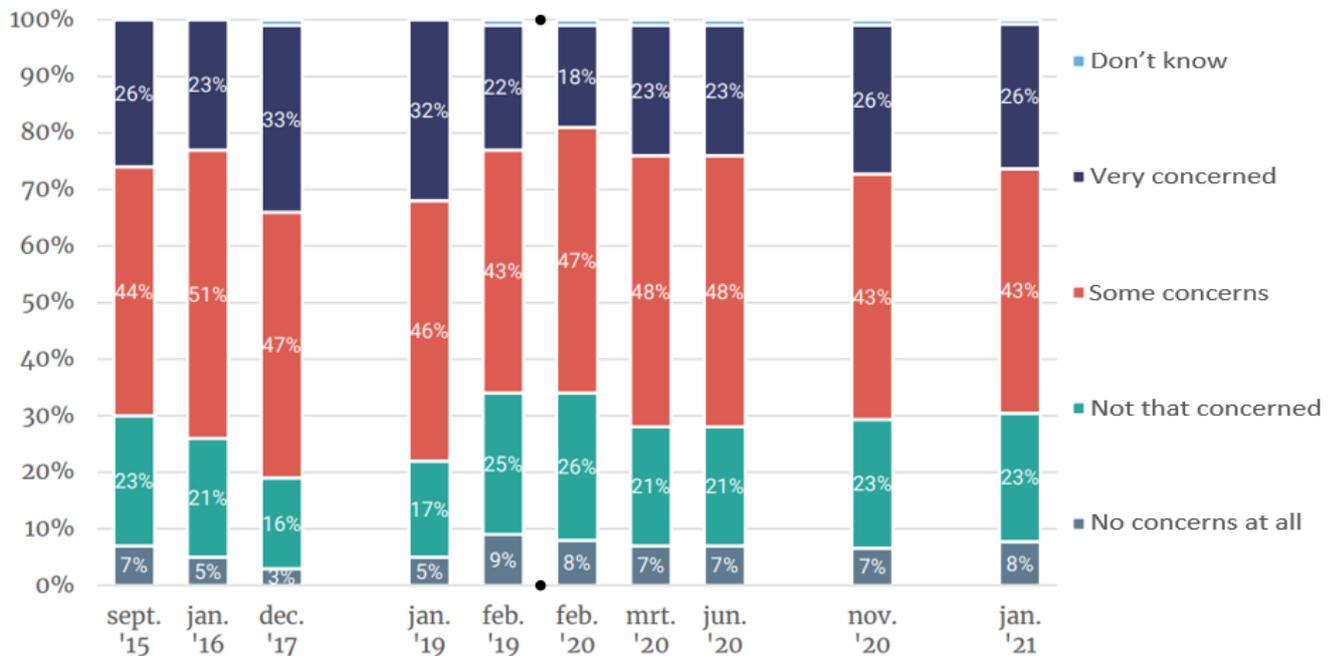


Figure 4 "To what extent are you concerned about greenhouse gas emissions (including CO₂), climate change and its effects on the environment?" (I&O Research, 2021)

As shown in figure 4, there is a change in concern between February 2019 (before the climate protests) and February 2020 (a few months after the major climate protests). The number of people that are very concerned about GHG emissions, climate change and its effects on the environment went down 4%. The percentage of people that have some concerns went up by 4%. People not that concerned went from 25 to 26%. And at last, people with no concerns at all reduced to 8%. The total percentage of people being either not that concerned or have no concerns at all remained at 34%. And the percentage of people having some concerns and those very concerned remained 65%. The number of people that were not that concerned and very concerned was in February 2020, both on their lowest point. The outcomes of these two poll measurements indicate that the climate protests did not increase national climate concerns. Before and after the protests, the measures even showed a 'negative' effect where people's concerns went down.

Looking at the larger picture, including all the years these questions were asked to the public, no definite trend was found. The numbers increase and decrease over the years, but do in general, remain quite balanced. There is no steady upward or downward trend in concerns. For example, it does not show that the number of people being very concerned or having some concerns is steadily increasing over the years.

The question on people's concern about GHG emissions, climate change, and its effect on the environment was repeated on other occasions, published in the I&O report 'Hoe denkt de Nederlander nu over het klimaat?'. This report only provides a less detailed scale being 'don't know', not as much/none, and much/some concern. It did, however, provided more measurements in 2019, as opposed to the previous report. The outcome of these polls can be seen in figure 5. The black dots again represent time intervals where the climate protests took place.

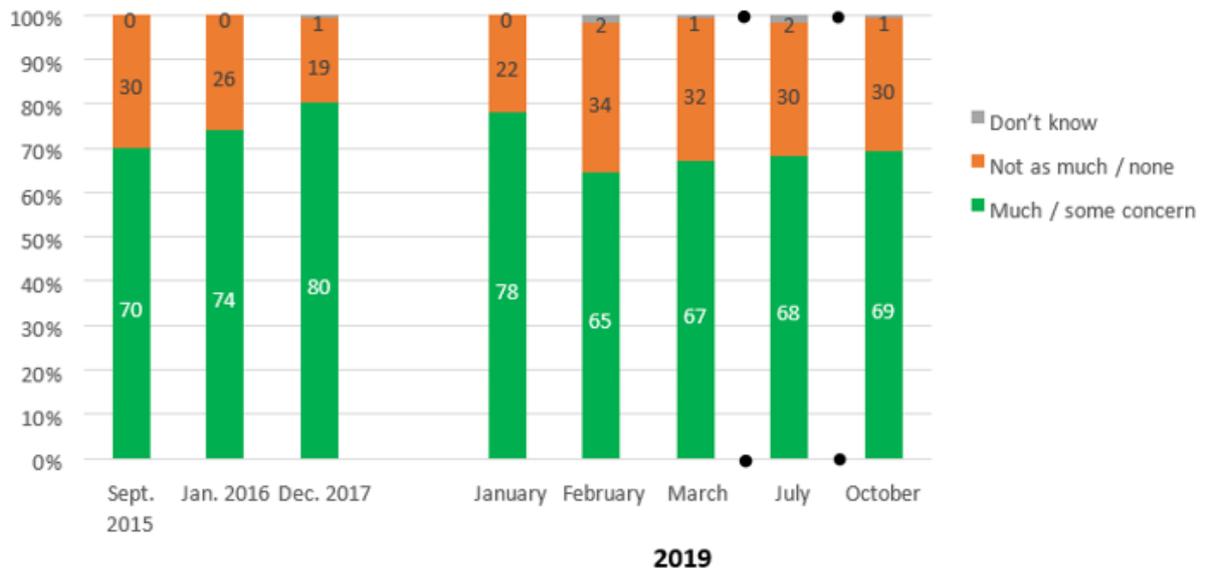


Figure 5 "To what extent are you concerned about greenhouse gas (CO2) emissions, climate change and its effects on the environment?" (I&O Research, 2019).

Figure 5 again shows Dutch opinion on GHG emissions and to what extent they are concerned about this. The largest national climate strikes took place between March, July and October. Therefore these three measurements are most important. Figure 5, only show a minor change. Between March and July, people have not as much to none concerns decreased by 2%. People that have much to some concern increased by 1%, and people not knowing increased by 1%. A slight increase in concern was also seen between July and October 2019. The number of people with much to some concern increased by 1%. People not knowing went from 2 to 1%. People with not as much or no concern remained at 30%, and people with some too much concern went from 68 to 69%. After the dip of concern from January 2019 to February 2019, the level of concern has risen constantly (and about linearly) to October 2019. The time of the protests does not show a significant increase in this trend. However, after both series of protests, climate concerns did increase (+1%).

The second question from the research report 'Klimaat en het nieuwe Kabinet' by the I&O is about people's opinion on what role the parliament plays in reducing GHG emissions. People were asked if the next parliament should do more, less or about the same to reduce greenhouse gas emissions? (Compared to measurements currently in place or announced). This question is in line with the demands of the climate protests for more national and governmental climate action. The outcome of these polls is shown in figure 6.

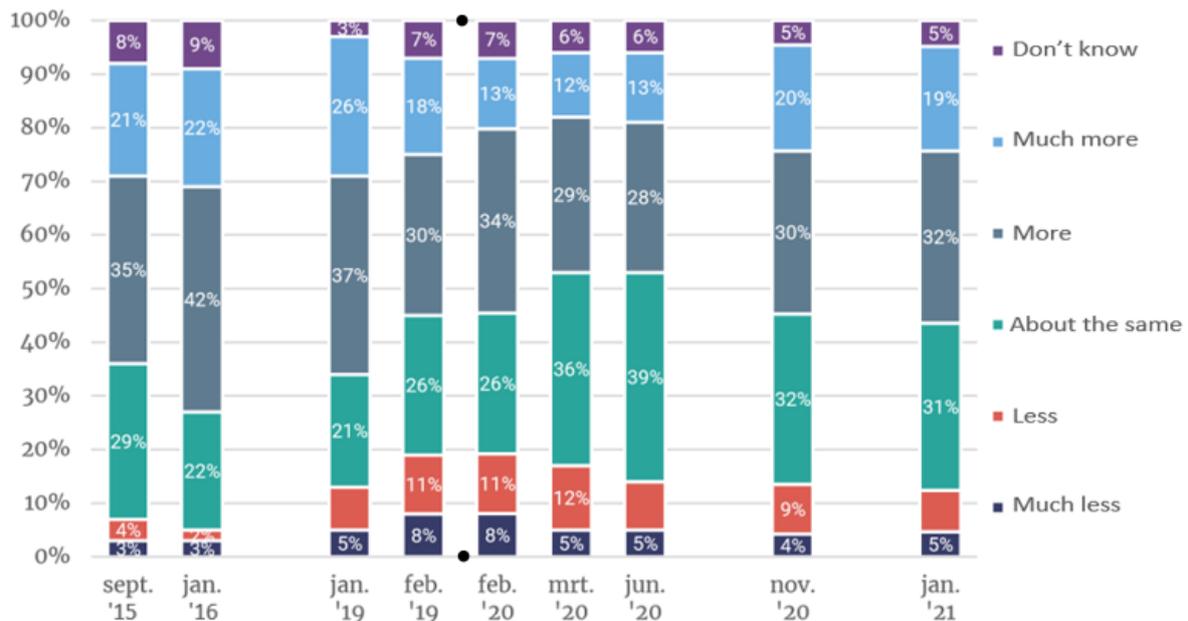


Figure 6 “Do you think that a next parliament should do more, less or about the same to reduce greenhouse gas emissions? (Compared to measurements currently in place, or announced)” (I&O Research, 2021).

The measurements prior to and after the largest national climate protests were February 19 2019 and February 20 2020. As shown in figure 6, the percentage of people who believe that the parliament should do much more to reduce GHG emissions has reduced from 18% to 13%. The amount of people believing the parliament should do more has increased by 4%. The rest of the percentages stayed the same. This does not show an overall decrease in support for more climate action. However, it does show a decrease in the level of support.

There is a trend of decreasing support for more climate action by the parliament from January 2019 towards March 2020. Between June 2020 and November 2020, many people want the parliament to take more climate action. However, this large increase, which remained relatively stable till January 21, was months after the last large climate protests. This opinion poll indicates that the climate protests in 2019 did not positively affect people’s belief that the parliament should take more action to reduce GHG emissions.

The question on people’s opinion on the amount of climate action the parliament is taken was also repeated on another set of polls done by I&O Research in the report *Hoe denkt de Nederland nu over het klimaat?*. The scale was more simplified, only providing insights in people not knowing, and thinking the parliament should take less, as much, or more climate action. The outcome of these polls can be seen in figure 7. The black dots again represent time intervals where the climate protests took place.



Figure 7 “Do you think that cabinet-Rutte should do more, less or about the same to reduce greenhouse gas emissions? (Compared to measurements currently in place, or announced)” (I&O Research, 2019).

Figure 7 shows from January to February a large decrease when it comes to people thinking the cabinet should do more. From February 2019 towards October 2019, the opinions remained quite stable. Percentage of people thinking the cabinet should do more went down between March and July and up again between July and October. There was also an increase of people not knowing whether the parliament should take more climate action, and people believing the parliament should do just as much reduced to a total of 27%. Again, the protests do not show a significant effect, and between February and October 2019, even a decrease of 1% in people wanting more parliamentary climate action is shown. This opinion poll indicates that the climate protests had no positive effect on people’s belief that the parliament should take more climate action.

EUROBAROMETER polls

Questions that were only asked in EB459 and EB490 are not taken into account, as both of these measurements were prior to the largest climate strikes. They could provide information on changes in public opinion between these two time periods. However, as they were prior to the largest climate protests, these protests could not have an effect on them.

The first and most important question derived from the Eurobarometer is about people’s belief on how serious a problem they think climate change is at this moment. This question is repeated in all four special Eurobarometer’s. Eurobarometer 490 does not provide the more detailed answer of people scaling their concern, only the already categorized answer. The outcomes of these polls can be seen in table 7.

Table 7 “And how serious a problem do you think climate change is at this moment? Please use a scale from 1 to 10, with '1' meaning it is not at all a serious problem and '10' meaning it is an extremely serious problem. In (NETHERLANDS) (%)” (Source: Eurobarometer)

EUROBAROMETER	YEAR	1	2	3	4	5	6	7	8	9	10	Don't know
Special Eurobarometer 459	mrt-17	1	1	3	5	9	12	18	26	12	17	1
Special Eurobarometer 468	oct-17	1	0	2	2	7	9	23	26	12	17	1
Special Eurobarometer 490	apr-19	NOT SHOWN										
Special Eurobarometer 501	dec-19	1	2	2	3	6	11	26	26	14	9	0

EUROBAROMETER	YEAR	Not a serious problem (1-4)	A fairly serious problem (5-6)	A very serious problem (7-10)
Special Eurobarometer 459	mrt-17	5	16	78
Special Eurobarometer 468	oct-17	5	16	78
Special Eurobarometer 490	apr-19	7	19	74
Special Eurobarometer 501	dec-19	8	17	75

The comparison between climate change concerns in 2017 and 2019 shows a decrease in levels of how serious a problem people believe it is. Two important measurements are those of April 2019 and December 2019. The poll data from April is after the climate protest on March 10 but prior to that on September 27. Therefore it can only determine the (possible) impact of the climate protests between April and December 2019. These two different polls do not show an increase in climate concern. The percentage of people perceiving it as not a serious problem increased by 1%. The people believing it's a fairly serious problem decreased by 2%. And at last, the number of people perceiving climate change as a very serious problem increased by 1%. This shows that both extremes (not serious vs very serious) both increased the same amount. Therefore this polling data indicates that the September 2019 climate protests did not increase the level of climate change concerns.

The next question was only repeated in Eurobarometer 468 and 501. During this large time period, more happened that influenced people's opinion than just the climate protests of 2019. However, it does show levels of 2017 in comparison to December 2019 on people's opinion to what extend protecting the environment is important to them. Protecting the environment is not directly linked to climate change concerns, but it is a significant part of climate change. The result from this poll can be seen in table 8

Table 8 “How important is protecting the environment to you personally? Please use a scale from 1 to 5, with ‘1’ being very important, ‘2’ being fairly important, ‘3’ being not very important, ‘4’ being not at all important, and ‘5’ being don’t know. In (NETHERLANDS) (%)” (%) (Source: Eurobarometer)

EUROBAROMETER	DATE	1	2	3	4	5			
Special Eurobarometer 459	mrt-17	NOT ASKED							
Special Eurobarometer 468	oct-17	59	37	3	1	0	Total important = 96	Total not important = 4	
Special Eurobarometer 490	apr-19	NOT ASKED							
Special Eurobarometer 501	dec-19	50	46	4	0	0	Total important = 96	Total not important = 4	

Table 8 shows that between October 2017 and December 2019, after the examined climate protests, the total percentage of people finding protecting the environment important (1-2) remained at 96%. The total percentage of people finding it not important remained 4%. The number of people finding it very important decreased by 9%. This shows that Dutch citizens in 2017 found protecting the environment more important than in 2019. This indicates that the 2019 climate protests did not positively impact people’s concern for environmental protection.

The next question is similar to that represented in the I&O reports, which is about the belief that the current national government is doing enough to protect the environment. The outcome of these polls can be seen in table 9.

Table 9 “In your opinion, is each of the following currently doing too much, about the right amount, or not enough to protect the environment? The (NATIONALITY) government (%)” (Source: Eurobarometer)

EUROBAROMETER	YEAR	Doing too much	Doing about the right amount	Not doing enough	Don't know
Special Eurobarometer 459	mrt-17	NOT ASKED			
Special Eurobarometer 468	okt-17	2	30	64	4
Special Eurobarometer 490	apr-19	NOT ASKED			
Special Eurobarometer 501	dec-19	12	24	61	3

The Eurobarometer 501 showed that only 3% of respondents believe that their national government is doing too much across the entire EU. In the Netherlands, this level is much higher, with the largest increase of all European countries (+10%) compared to 2017. This poll was held after all the 2019 climate protests, which demanded more governmental climate action. These polling results indicate that the 2019 climate protests had not positive effect on people’s belief that the National government should do more than they are currently doing to protect the environment.

4.2.1 Climate policy positions and voting polls

This research performed a qualitative analysis of the Party's manifestos to determine their 'general' climate policy position. This analysis, including the coding scheme and steps used to come to the classification of the parties based on their climate policy positions, can be seen in appendix 2. The data derived from the voting polls of the four different agencies applied in this research can be found in appendix 3. The ranking of the party's climate policy positions is a combination of the qualitative analysis and the party's main GHG reduction goals. The Party's main GHG reduction goals, derived from their manifesto's, can be seen in table 10.

Table 10 Parties CO2 reduction goals mentioned in their manifestos

Party	CO2 reduction goal 2030*	CO2 reduction goal 2050*
PvdD	100%	100%
GroenLinks	60%	100%
D66	60%	100%
PvdA	55%	100%
CU	55%	100%
SP	Not specified, wants to strengthen climate target (of 49%)	Not specified
VVD	49%	95%
CDA	Not specified, support Paris agreement (49%)	Not specified, support Paris agreement (95%)
SGP	49% (climate agreement)**	Not specified
50PLUS	Not specified	Not specified
DENK	Not specified	Not specified
PVV	0%	0%
FvD	0%	0%

*Both reduction goals are in comparison 1990 levels

**reduction according to the climate agreement, however, does not want this target to be legally binding

After applying the information derived from the Party manifestos, the following ranking was created (see table 11). The parties with the most ambitious targets and which represent themselves as the most pro-climate policy are the Partij voor de Dieren, GroenLinks, and D66. The parties that are most anti-climate policy are the PVV and FvD, both denying a climate crisis.

Table 11 Categorization of the political parties based on their climate policy positions

++	+	0	-	--
PvdD	PvdA	VVD	SGP	PVV
GL	SP	CDA	DENK	FvD
D66	CU		50PLUS	

Figure 8 shows the combination of the party's climate policy position and voting polls derived from all four polling agencies to analyze a change in public opinion. The timing of the used voting polls was based on the timing of the climate protests in 2019. Between each poll measurement, one or multiple climate protests have occurred. Figure 8 provides an overview of the fluctuation in voting behaviour at the time of the climate protests. Every polling agency showed a decrease of votes going towards parties considered most pro-climate (+ +). This indicates that the 2019 climate protests did not positively affect steering public support for these political parties. Looking at parties considered anti-climate (- -), three of the polls showed a small decrease in support (1 seat), while the poll by PEIL.NL showed an increase in support by two seats. Looking at the entire fluctuation of votes over the researched time period, there was no connection between the presence of a climate protest and an increase in votes for pro-climate parties.

As figure 8 shows, there are fluctuations between the different poll dates. However, over the total examined time period, minimal changes were observed. This shows that after the series of climate protests in 2019, no increased support for pro- or anti-climate parties was observed.

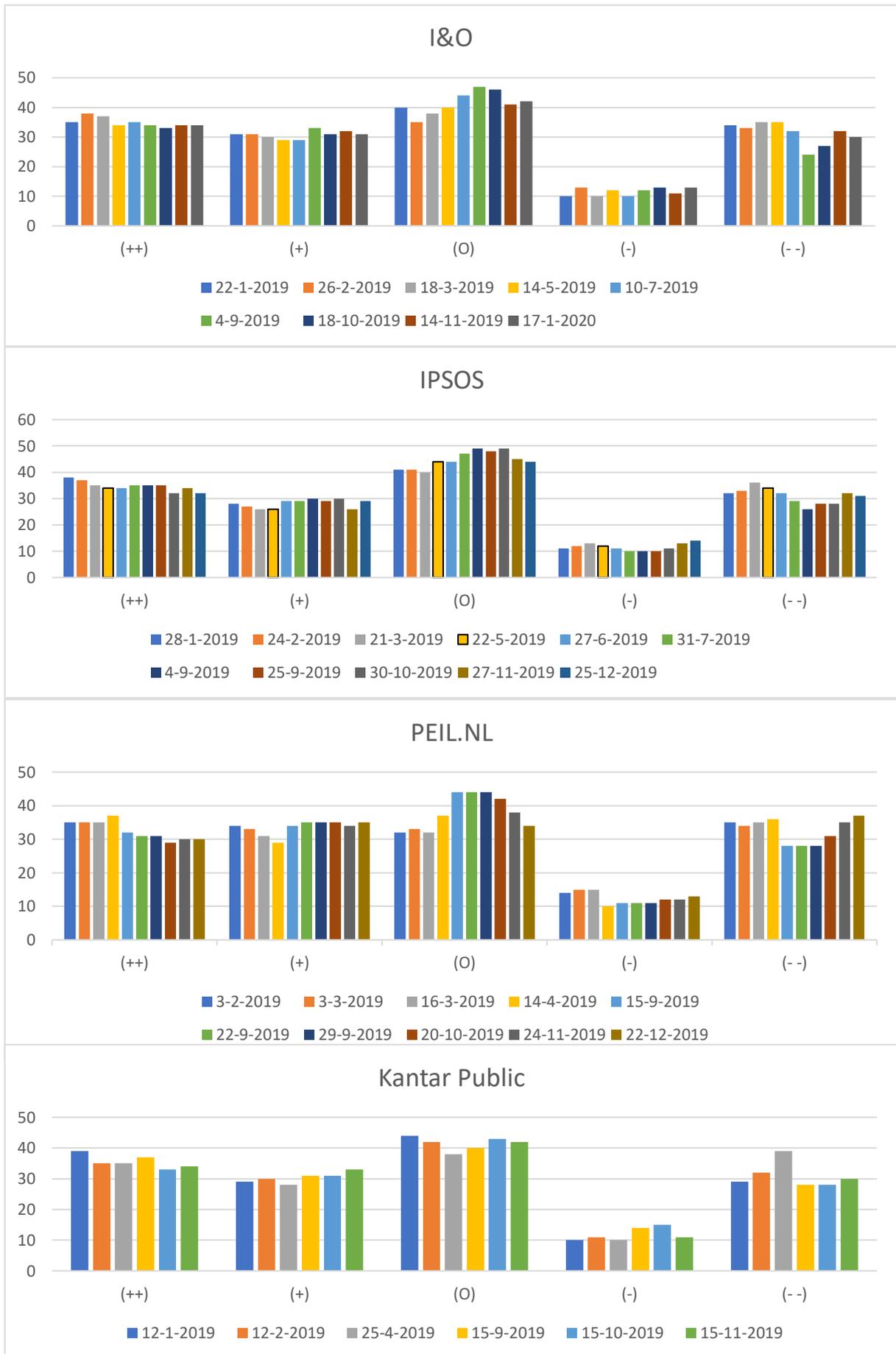


Figure 8 fluctuation in voting behavior based on party's climate policy position and poll data by I&O, IPSOS, PEIL.NL, and Kantar Public

4.3 Climate

4.3.1 Timing and magnitude

Figure 9 presents an overview of the timing and global magnitude of the series of climate events. This figure also includes the timing of elections, as they are a key aspect of a movement's ability to cause change. According to Het Parool, the student strike on February 2, the climate march on March 10, and the climate protest on September 27 were the three of the biggest protests the country had in the year 2019 (Khaddari & Wiegman, 2019).

The Fridays for Future strikes started on August 18 2018. The magnitude of this start was rather small. Few young activists, including Greta Thunberg, sat in front of the Swedish parliament every school day for three weeks (Bowman, 2020). This action went viral through Instagram and Twitter.

On February 7 (Thursday) 2019, the police estimated around 10.000 school students (most being high school students) joining a climate strike in the Hague (NOS, 2019a).

On March 10 (Sunday) approximately 40.000 people joined a climate march in Amsterdam (ANP, 2019a; NOS, 2019b; De Telegraaf, 2019; NU, 2019). This was not part of the Friday for Future protests, but another protest organized by Milieudefensie, FNV, Greenpeace, Oxfam Novib, DeGoedeZaak en de Woonbond de Eerlijke Klimaatmars in Amsterdam (GreenpeaceNL, 2019). This march attracted a more adult audience.

On March 14 (Thursday), the first large school strike in line with the FFF occurred, attracting, according to the police, approximately 5000-6000 people in Amsterdam (NOS, 2019c; De Telegraaf, 2019). This strike was mainly joined by school students.

The FFF movement resulted in the first global strike on March 15 (Friday). In the Netherlands, this resulted in a total of 9 strikes (Fridays for Future, 2019).

March 15, during the first global strike, there were around 3000 protesters in the City of Maastricht (NOS, 2019d).

On May 24 2019 (Friday), the second global school strike occurred, joined by approximately 1500 protesters in Utrecht (NOS, 2019e; De Telegraaf, 2019b).

In the week from 20-27 September, the Global Week For Future took place. In the Netherlands, on September 20 2019, a climate protest took place in Maastricht, attracting around 2500 people (Abeling, 2019).

On September 27 (Friday), one of the largest climate protests in national history took place, attracting around 30.000 people in The Hague, and even reports over 35.000 people (Dongen, 2019; De Telegraaf, 2019c).

On November 29 2019, the fourth global strike took place. No large protests were found in the Netherlands.

TIMELINE

Climate movement

2017-2021

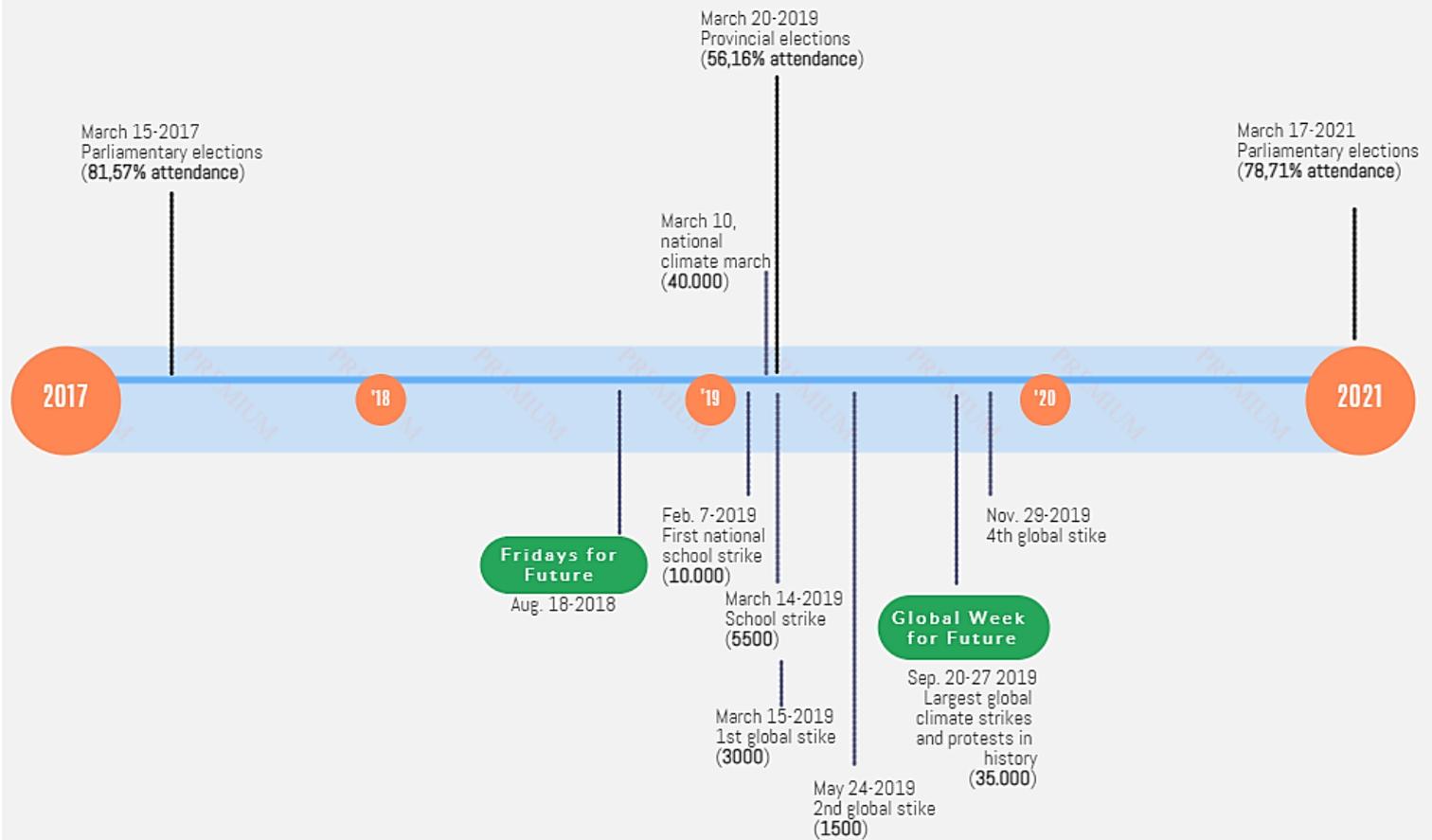


Figure 9 Largest reported national climate protests 2019

4.3.2 Type of protests (Level of disruption)

The media analysis presented in this research focused on the national climate strikes and protests shown in figure 9. This set of protests and strikes were found not to be disruptive. They were considered peaceful marches, which in advance were discussed with the municipalities they were taken in. The larger protests were supported and guided by the police, and there were no arrests made. These strikes and protests included predetermined walking paths and meeting grounds. Organizers of these protests, such as Greenpeace and Milieudefensie, together with the municipalities, arranged the design of these protests. In all these protests, no disruptive tactics were found or shown through media, such as blocking roads or going against directions given by the police. There were also no forms of violence reported. The school strikes could be considered 'disruptive' because students skipped classes, which is against the law of compulsory education at that age. Therefore the school system was disrupted these days. However, these students still needed permission from their parents (send to their school) and sometimes needed to add a written motivational letter on why they wanted to join.

The protests joined by adults were also not considered disruptive, as they were not official strikes where people left their work to join the protests. The article by Trouw showed that both employers and the Federation of Dutch Trade Unions (FNV) do not regard the actions as an 'ordinary' strike and advise participants to take a day off (Trouw, 2019). Many people call these protests climate "strikes". However, a strike means that there are issues between employer and employee. In this article spokesman of the Employers' Association of the Netherlands (AWVN) acknowledges peoples right to campaign, but the problem presented here is not an issue between employer and employee (Trouw, 2019).

The protests which this research focused on were not seen as disruptive. This does not mean that there were no disruptive climate protests present during these periods. Extinction Rebellion is a well-known climate activists group known for its 'extreme' form of climate activism. For example, on October 13, 2019, Extinction Rebellion protested in Amsterdam and roadblocked a bridge in the city centre. They refused to move after the police instructed them. This resulted in 130 arrests and 250 people forcibly moved (Het Parool, 2019). The municipality applied SWAT teams to remove the protesters and make the road available for traffic again. In another protest by Extinction Rebellion on October 7 2019, activists also blocked the road in the centre of Amsterdam. This protest resulted in tens of arrests and also forcibly moving people from the street by the police. There were more disruptive protests like these during this period in 2019. Their magnitude is much lower, usually attracting a couple of hundred activists. However, their level of disruption is much higher. These types of protests, especially by Extinction Rebellion, are not something new. They have been occurring on multiple occasions over the last years.

4.3.3 Providing feasible targets and solutions

The strike on February 7 aimed to raise climate awareness and move politicians to undertake more action. According to the school strikers, the presented climate agreement was disappointing, missing crucial policies that cause changes in the industry sector. According to them, the current climate agreement is not strict enough (NOS, 2019f). One of the main organizers of this school strike is Stijn Warmenhoven, a high school student. In an interview with AD, he stated that one of the main demands of the school strikes was a CO2 tax for the entire industry sector, not just the coal and gas power stations (Dongen, 2019a). In the presented climate agreement at the time, this industrial CO2 tax was included. The idea of implementing this CO2 tax on an industrial level has been around before this strike. This is a measurement the political party GroenLinks has presented earlier (GroenLinks, 2019). The exclusion of a CO2 tax on the industry level was back in 2018 already the reason for five environmental organizations (Greenpeace, Milieudefensie, Natuur & Milieu, de Natuur en Milieufederaties, de Jonge Klimaatbeweging, MVO Nederland) to withdraw from the climate agreement (AD, 2018). This shows that the provided idea of an industry CO2 tax was a provided target and solution years prior to these protests.

The organizers of climate protest on March 10 were Milieudefensie, de FNV, Oxfam Novib, Greenpeace, DeGoedeZaak, and de Woonbond. According to Milieudefensie, one of their main messages and demands is the polluter pays principle. They are done with vague promises and demand concrete agreements where the largest polluters pay the highest bills (Milieudefensie, 2019). Greenpeace shares these ideas (GreenpeaceNL, 2019). They also demand that the large polluters are going to pay their fair share. The same goes for DeGoedeZaak, which demands a fair distribution of burdens and benefits, a polluter pays principle, a more sustainable society, and a future with green growth (DeGoedeZaak, 2019). The other organizers all share these common ideas.

The climate protest on September 27 is again a more general ask for more climate action. It is part of the FFF climate protests/strikes series and of the Global Week for Future (Dongen, 2019). The main organizers of this protest were Fridays for Future, Fossilvrij NL, Code Rood, Teachers for Climate, and Earth strike. Multiple political parties were also partners of these protests. These were GroenLinks, PartijvoordeDieren, SP, PvdA, D66, Bij1, and Volt. The goal is not just to raise national awareness and governmental action, but also to make a worldwide statement. There was an official website created for this climate strike/protests, known as klimaatstaking.nl. One of the demands was again that the largest polluters should pay the highest costs, according to Earth Strike Nederland, one of the main organizers. The protests also demanded an ambitious and socially fair climate policy (Klimaatstaking, 2019). The demands from the Friday for Future movement, main organizer of this protest, are to keep the global temperature rise below 1.5 degrees compared to pre-industrial levels. It also wants to ensure climate justice and equity, governments to follow the Paris agreement, and listen to the best and united science currently available (Fridays for Future, 2019a).

Due to the magnitude and amount of media coverage, the smaller protests shown in figure 9 were not analyzed on to what extent they provided feasible targets and solutions.

4.3.4 Presence of political allies

Table 12 provides the twitter analysis of standing political parties in parliament 2019, including the party leaders. This provides an overview of what extent these parties and party leaders supported this series of climate protests. The right side of the table offers extra comments. These show tweets that might not be directly aimed at the protests but are still interesting for the discussion of this research. This analysis also includes, for the parties not showing any support for the climate protests, if they supported other types of protests. This was done to prove that these parties actively using this platform to show their support. Some parties do not have a party leader that is active on Twitter and was therefore not shown. This analysis also shows if the political party joined the climate protest in question by showing 'JOINS' under the different protests. The SGP and 50Plus were both found to not be active on Twitter. This research looked beyond Twitter to find a connection between these two parties and the climate protests. This connection was not found.

The most supportive parties are GL and PvdD. These parties both showed support for six different climate protests and joined them on multiple occasions. D66 was also supportive of multiple protests and also joined them. The same goes for SP and PvdA. The CDA was found to present at a single climate strike, that of March 10. On September 27, the CDA also showed support for the climate strikes. The VVD, PVV, CU, 50Plus, SGP, DENK, and FvD did not support the climate protests in 2019, while some did show support for other types of protests (e.g. farmer protests). On September 27, both the PVV and FvD posted something negative in relation to climate action. These tweets were not necessarily directly aimed at the protests, but this was the day of the largest global climate protests ever occurred. The PVV posted that Islam should be seen as a larger threat than climate change, and FvD showed support for a petition to stop all forms of national climate policies. Table 12 also provides the total percentage of parliament showing support per climate protest. This shows that only on March 10 and September 27, most of the parliament (53,33%) supported the climate protests.

Table 12 Twitter analysis: political party support for climate strikes and protests

Political party	School strike February 7 - 2019	Climate protest March 10 - 2019	School strike March 14 - 2019	School strike March 15-2019	School strike May 24 - 2019	Climate protest/strike September 20 - 2019	Climate protest/strike September 27 - 2019	Extra comments
VVD	X	X	X	X	X	X	X	Oct 1: Supports farmer protests Oct 7: In relation to an illegal climate protest by Extinction Rebellion (ER) the VVD said that actions like this only creates resistance towards the things the government is doing for the climate. Oct 30: showing support for the builders protests
Klaas Dijkhoff	X	X	X	X	X	X	X	X
PVV	X	X	X	X	X	Sep 27: Posting a picture saying: Afraid of climate change while islam is ruining my future	X	Sep 30: Supports farmer protests Oct 7: Negative tweet against the 'Left-wing professional idlers, unemployed climate hippies and ecological lazy persons' in relation to the ER climate protest Oct 11: Negative tweet against the disruptive climate protest in Amsterdam by ER
CDA	X	X	X	X	X	X	X	Oct 1: Supports farmer protests
Pieter Heerma	X	X	X	X	X	X	X	X
Agnes Mulder (climate spokesperson)	X	March 10: Shows support + JOINS	X	X	X	X	Sep 27: Shows support	X
D66	Feb 7: Shows support + JOINS	March 10: Shows support and asks others to join + JOINS	X	X	X	X	Sep 27: Shows support + JOINS	X
Rob Jetten	Feb 7: Shows support + JOINS	March 10: Shows support + JOINS	X	X	X	Sep 23: Shows support for the global climate strikes and asks people to join next event on Sep 27	Sep 27: Shows support + JOINS	X
GL	Feb 7: Shows support for the school strikes and asking people to join the climate protest on March 10 + JOINS	March 10: Shows support and asks others to join + JOINS	X	March 15: Shows support for the global climate strikes	May 24: Shows support for the climate strike in Utrecht	Sep 20: Shows support for the Global Week for Future and asks people to join Sep 27	Sep 27: Shows support and providing an online platform for others to join + JOINS	X
Jesse Klaver	Feb 7: Shows support + JOINS	March 10: Shows support + JOINS	X	X	X	Sep 20: Supports global climate strikes	Sep 27: Shows support + JOINS	X

Table 12 continued - Twitter analysis: political party support for climate strikes and protests

Political party	School strike February 7 - 2019	Climate protest March 10 - 2019	School strike March 14 - 2019	School strike March 15-2019	School strike May 24 - 2019	Climate protest/strike September 20 - 2019	Climate protest/strike September 27 - 2019	Extra comments
SP	X	March 10: Shows support + <u>JOINS</u>	X	X	X	X	Sep 27: Shows support + <u>JOINS</u>	X
Lilian Marijnissen	X	X	X	X	X	X	Sep 27: Shows support + <u>JOINS</u>	X
PvdA	Feb 7: Shows support and asks people to join the climate protest on March 10 + <u>JOINS</u>	March 10: Shows support + <u>JOINS</u>	X	X	X	X	Sep 27: Shows support	X
Lodewijk Asscher	Feb 7: Shows support + <u>JOINS</u>	March 10: Shows support + <u>JOINS</u>	X	X	X	X	Sep 27: Shows support + <u>JOINS</u>	X
CU	X	X	X	X	X	X	X	X
Gert-Jan Segers	Feb 7: Calls the school strikes heartwarming	X	X	X	X	X	X	Oct 1: Supports farmer protests
PvdD	Feb 7: Shows support + <u>JOINS</u>	March 10: Shows support + <u>JOINS</u>	March 14: Shows support for climate strikes on 10, 12, and 14 March	X	X	Sep 20: Shows support for the global climate strikes + <u>JOINS</u> smaller strikes in the Netherlands	Sep 27: Shows support and asks others to join + <u>JOINS</u>	Nov 29: Shows support for the global strikes and asks others to join smaller strikes in the Netherlands
50Plus	X	X	X	X	X	X	X	X
SGP	X	X	X	X	X	X	X	X
Kees van der Staaij	X	X	X	X	X	X	X	X
DENK	X	X	X	X	X	X	X	Oct 1: Supports farmer protests
Farid Azarkan	X	X	X	X	X	X	X	X
FvD	X	X	X	X	X	X	X	Oct 1: Supports farmer protests
Thierry Baudet	X	X	X	X	X	Sep 20: Supports a petition to stop national climate policies	X	X
Percentage of parliament showing support	34,70%	53,33%	3,33%	9,33%	9,33%	X	53,33%	X

Aside from this Twitter analysis, a general google search was performed to show support from political allies or instances of political elites showing a negative form of support, which negatively impacts the movement's goals. One finding was that of an interview given by Prime minister Rutte on the day of the first school strikes (February 7). His words were; *'I don't think there's much discussion whether this government is doing enough'*. In which the reporter responded: *'But, the protesters do turn against you (Rutte), and say that you are not doing enough'*. His reaction to this was: *'people, what more could you want? You can't possibly ask for more than we're trying to get right now'*. Rutte said that people, and also these young climate activists, should focus their attention on getting Europe along with the high ambitions the Netherlands already has (NOS, 2019g). This reaction by Rutte showed that he believes that the current parliament, on February 7 2019, was already doing more climate action than people can ask for. At the time, there was a climate agreement in the making. This agreement was planned to be analyzed and calculated on its effectiveness on March 13. Therefore, Rutte's reaction was that people first had to wait for the outcome of the climate agreement before they demand more action. In an interview with Wiebes, minister of economic affairs and climate, on February 1 2019, he states that he is not enthusiastic about the school students skipping classes to join a climate strike (De Telegraaf, 2019d). He mentions that in the Netherlands, we are working on the climate problem on a large scale and that the one essential thing we need for this is sufficient educated people. Therefore skipping classes is, according to him, not the way to solve the problem. This shows that the minister of climate did not support the climate strike on February 7. Both Rutte and Wiebes are high ranked entities within the parliament. Their opinion, therefore, represents not just themselves but also a part of the parliament. In this instance, both showed no support for the climate strikes on February 7.

In another instance, the political party Forum for Democracy contributed to distributing a fake news photo that would show that the striking climate students had left a huge mess in The Hague (Quekel, 2019). In reality, it turned out to be an old photo at a McDonald's in Tilburg. This photo provides negative publicity for the climate protests, while, in fact, the protesters even cleaned the mess they made after the protest (Quekel, 2019). There were also other forms of negative publicity present during these protests. For example, AD highlights in one of their article's subtitle the school strikers' reasoning on why she was joining them. Her reason was: "Because I don't have a class then.". Articles like this undermine these protests' goals and portray them negatively based on a single comment (Huibers, 2019). Another example is an article and video by the Telegraaf, which shows that students who skipped class to protest were eating at McDonalds, which is according to the interviewer, not very environmentally friendly (De Telegraaf, 2019e). Articles like this ridicule the school climate strikes and have the ability to lower their level of being taken seriously. This was again shown in another interview by de Telegraaf. They interviewed climate school strikers, where one admitted he flew three times a year, which is also the title of this reported article (De Telegraaf, 2019f). Flying three times a year is, of course, not considered very environmentally friendly. And at last, another article by De Telegraaf, with the title; *'Climate school strikers just want a day off'* highlighted that these school students only joined these climate protests to not go to school (De Telegraaf, 2019g). Articles like the ones presented above, where the climate protests are negatively portrayed based on a few assumptions, can harm the goal and effect of these protests. The same goes for the spread of 'fake news'. The spreading of fake news can cause people to lose support for these climate protests, as they might associate them with something negative. The exact effect of these articles and the amount of people they reached is unclear.

5 Discussion

5.1 Discussion on results

5.1.1 National climate policies

As shown in the result chapter, no direct links were found between the climate protests and proposed amendments, motions, and bills. This research did not find any connection between legislative activity and the analysed climate protests of 2019. This is not unexpected, as literature by other social movement scholars suggest that social movements and protests do not directly influence policy change (Giugni, 2007; Mcadam & Su, 2002; Cress & Snow, 2000). However, it is remarkable that the climate protests of 2019 were in no way named in any of the parliamentary records. The explanation on why these protests had a possible lack of impact on climate policies is elaborated on below.

5.1.1 Public climate opinion

This research did not show a change in public opinion, not through the existing public opinion polls, and not through the voting polls in combination with party's climate policy positions. Climate change opinion is multidimensional, dynamic, and differentiated (Shwom et al., 2015). Public opinion on climate change includes many factors, such as beliefs on anthropocentric climate change, risk perception, problem salience, and the multitude of ideas on how this problem should be tackled (if tackled at all) (Shwom et al., 2015). Multiple factors affect public opinion at the same time, making it hard to distinguish the single effects of climate protests.

According to the Receive Accept Sample (RAS) model by Zaller (1992), people base their answers in polls on the latest information presented to them on a particular issue. Elite cues play a significant role in this, as they influence media and openly advocate their opinion on climate issues. The RAS model showed evidence that individuals' opinions on climate concern can change over time, but these changes are often based on how the recent media presented the issue. The relationship between media and national public opinion in the Netherlands is something untouched. Research on how the media portrays climate change in the Netherlands could contribute to a more extensive understanding of the climate movement's effectiveness. For future research, it could be interesting to see how the media has portrayed climate change. Including to what extent this aligns with how (the more significant part) of responses in the public opinion polls aligns with these media representations. Another interesting angle is to see if media portrayals of climate change have changed after these series of climate protests, as climate protests can also influence climate discourses (United Nations, 2013).

5.1.2 Effective protests

5.1.2.1 Timing

As shown in the timeline provided earlier, the national climate protests in 2019 were not anywhere close to the 2021 Dutch parliamentary elections and two years after the election in 2019. The earlier protests (February – March) did surround the provincial elections of March 20 2019. However, the people representing the provincial states, which indirectly determines the seats allocated in the first chamber, do not rule the country. The task of the first chamber is merely to approve or reject new bills adopted by the parliament. This approval or rejection is not based on the content of the bill, but only focused on if the bill fits together with already existing laws and rules. The house of representatives is the one that makes the bills. The public directly chooses the people representing the parliament. Therefore, protesting around the provincial elections is not considered an effective method to influence national climate policies. It does affect how the different provinces address climate change within their area. However, they still need to adhere to national policies first. Literature showed that social movements and protests acting around election periods have a higher chance to cause policy

change (Agnone, 2007; Burstein & Linton, 2002; Amenta et al., 2005). However, this was not the case with the 2019 climate protests, as the parliamentary elections were two years away. The same argument was made by Kristof Jacobs, a political scientist at Radboud University, who indicated that the timing of the climate protest of 20-27 September in the Netherlands was disadvantageous for the protesters because in order for these protests to cause policy change, people need to be able to vote quickly after (Wiering, 2019). The day on which the specific protests occurred is also something that should be taken into account. For example, the climate protest on March 10 (which attracted the most people out of all the protests) was on a Sunday. On this day, most people have time off work. As mentioned by the Employers' Association of the Netherlands, people who wanted to participate in the other climate protests (e.g., Friday, September 27) needed to take an official vacation day. Factors like this raise the threshold for people to join these protests.

5.1.2.2. Magnitude

This research showed that the magnitudes of the 2019 climate protests were larger than ever. On a global scale and on a national scale, the country has never experienced climate protests on this level. The two largest protests were that of March 10 (40.000 participants) and September 27 (30.000) participants, roughly equal to 0,2% of the entire population protesting. According to literature, newly increased magnitudes and increased mobilization have a higher chance to cause a change in the status quo (Louis, 2009; Amenta et al., 2010). However, this was not shown in the research presented here. This raises the question of whether the magnitude was still considered too low or that other factors caused this lack of change. Based on the literature and the highlighted importance presented on magnitude in social movements, it is considered that magnitude is not the reason for this lack of change. As the 2019 climate protests can be considered 'newly increase magnitudes'. Future research could compare the Netherlands with other countries to fully determine the role of magnitude in climate protests. This is an ideal situation, as the Friday For Future movement was a global one. This movement organized protests all over the world, which sometimes differed greatly in magnitude. For example, on September 27 (largest national climate protest in the FFF series), the total attendance rate in the Netherlands was 0,17% of the total population. While in Italy, this number was 1,66% and in Germany 1,44% of the total population (Fridays for Future, 2019). Despite these protests being in different countries, they arose from the same movement and shared the same goals. As shown, the level of attendance compared to the total population was much more significant in these countries. This would expect, according to literature, the possible impact these protests have on policies is higher. Observing a change in public opinion and climate policy in regards to the climate protests held in Germany and Italy could provide a legitimate comparison on the role magnitude plays in protests. However, the political and social arena also differs greatly in these countries and the Netherlands, which raises the level of difficulty in showing the exact role magnitude played in these protests' effectiveness.

To explain the level of magnitude in the Netherlands, it is also interesting for future research to apply the theory of participation and social cognitive theory to analyze why people are not participating in these protests. Especially on how people in the Netherlands perceive the effectiveness of climate protesting. For example, the work by McAdam (2010) on political process theory focuses on the element of cognitive liberation, which is about movement participation. McAdam (2010) states that for people to join a social movement, they need to believe that the current political system is illegitimate, unjust and believe that their participation in this movement could create meaningful change. It is shown in the public opinion polls provided earlier that the larger part does consider climate change a very serious problem (74%), and many even believe that the government should take more action (+/- 50%). However, this percentage of people 'believing' this is not close to those who take action in protests to support these beliefs. There are multiple theories on why people are not

participating in protests. This also has to do with what extent the focused problem is perceived as a threat and other factors (Roser-Renouf et al., 2014). Explaining the level of participation was outside the scope of this research but could contribute to an even better understanding of the Dutch climate movement.

5.1.2.3 Type of protest

The 2019 series of climate protests included a distinction between two main types. These were the school strikes and the more public climate protests. As presented through the media analysis, none of the protests examined in this research showed high levels of disruption. They all were considered peaceful marches, escorted by the police and in advance consulted and planned with the municipality in which they were held. School strikes can be considered a certain level of disruption because they go against the legislative rule known as compulsory education. Therefore skipping classes does, in fact, go against a part of the law. However, they were not disruptive in a way where they hindered society (by for example blocking the roads). As literature showed, disruptive protests can increase effectiveness (Smith & Louis, 2008; Louis et al., 2005). However, they can also hinder the movements' effectiveness, especially when people consider the protest a level of disruption that hinders them or society (Boudon, 2016; Hess & Martin, 2006; Feinberg et al., 2020). However, as this research also showed, the climate protests in relation to the FFF movement and March 10 were not the only protests occurring in 2019. Examples of other protests were those by Extinction Rebellion. Their protests were considered to be highly disruptive, and therefore in danger of decreasing public support. Since these non-disruptive protests and disruptive protests by other movements happened in the same time period, this research could not determine the exact role disruption played. It could be the case that the climate protest held by Extinction Rebellion did increase public support, but at the same time, they could have hindered support for climate action. Based on the literature presented in this research, it is expected that these extreme disruptive protests by Extinction Rebellion do lower public support for the issue they are addressing. The literature on disruptive protests also indicated that the other protests, those of March 10 and the FFF movement, were lower in their effectiveness due to the mild tactics they applied. The exact effect of this level of disruption requires more research. Future research could look into the impacts Extinction Rebellion has on climate policy, and from there, determine how their disruptive protests benefit them or put them at a disadvantage.

5.1.2.4 Changing socio-cultural beliefs

Organizations such as Milieudefensie and Greenpeace have been providing feasible climate targets and solutions for years. The same goes for the political parties partnering these climate protests, such as GroenLinks and PartijvoordeDieren, presenting new and feasible climate measures to the parliament each year. There are plenty of targets and solutions present for the current government to implement. However, the climate protests do not only support the targets and solutions represented by their main organizers. People are free to join these protests with their own ideas on how this problem should be tackled. Literature showed that The movement has to provide credible targets and solutions that have to be minimally plausible and fitting within the present culture. If movements lack these solutions, the movement will have a lower impact (Amenta et al., 2010). The movement should also aim for goals that fit the present political arena. It can be said that the government does have a magnitude of policy measures that they could implement to lower GHG emissions. The only question is, at what cost? Therefore, it can be said with high certainty that a plausible 'lack for feasible targets and solutions' is not the reason that these protests did not cause policy change.

As shown in the analysis on public opinion, the climate protest did so far not show an impact on public opinion. According to literature, collective action will only create change in the status system if it changes socio-structural beliefs (Louis, 2009). This research did not show that the movement did this.

This is, therefore, an explanation of why there is a lack of policy change regarding these climate protests.

5.1.2.5 Presence of political allies

Looking at the analysis of political allies, a relation is found between these allies and those that are already currently in parliament pushing for stricter climate measures. The two parties that showed the most support are GroenLinks and Partijvoor de Dieren. Based on their party manifestos, these were also the two parties considered the most pro-climate. The same goes for the other parties, D66, SP, and PvdA. All parties that showed much support for the climate protests, are the same parties that want to increase governmental action on climate change. These are also the parties that joined most of the climate protests in 2019. These pro-climate parties do not outweigh the parties that are showing less support and considered to be less pro-climate. The outcome of this support analysis was as expected, where the 'greener' parties showed the most support. As mentioned in the literature, the presence of political allies is crucial to facilitate policy impact (Amenta et al., 2010). Giugni (2007) argues that without political allies, the protests will almost no impact at all. This research does show that there are plenty of political actors and parties supporting these climate protests. Therefore, a possible lack of political allies is not considered the reason for the lack of impact these protests had on national climate policies, as the political elites supporting these protests are fighting every day for stricter national climate measures.

5.1.3 hidden effects

This research focused on protests, which are only a single tactic that social movements can use to cause change. During these protests, other forms of social movement tactics were probably also applied. According to the literature, it is hard to determine which tactic is most effective, as this also mainly depends on the specific context of the situation (Priest, 2016). Marches and protests are just a few of the tactics social movements use to cause change. It is shown that an increase in tactics, such as lobbying and boycotts, also increases the movement's success (Giugni, 2007; Priest, 2016). Giugni (2007) also argues the low impact that climate protests have on their own, saying that "*movements have, at best, a moderate impact on public policy and, if they are to have a real impact on public policy, they need to take advantage of favourable external resources*" (Giugni, 2007, p.54). The fact that there was no significant link found between climate protests and changes in public opinion or climate policy in this research does not mean that they had no effect at all. As mentioned, protests are a small part of a social movement's tools to cause change. It could be the case that these protests played their role, but other important parts of the social movements were failing to achieve their goals. Climate protests do impact more than public opinion, elections, and policy change. They also can impact individual behaviour, which still impacts GHG emissions, but on a different social level. This impact was not the scope of this research, as this aimed to address policy change. However, it is interesting for future research to look at other factors the protests might have influenced, such as the framing of climate change in the Netherlands or climate discourses in the Netherlands.

A larger part of academic research on public opinion and how it influences policy was done in the US. It would be interesting to focus more on the Netherlands, as it was presented earlier that the political system in place makes a big difference in the relation between climate movements, public opinion, and national policies. The political and social arena (including the media scene) of the Netherlands and the US are different in several ways. Therefore it can not be assumed that key factors of social movement theory in the US are also the key factors influencing public climate concern in the Netherlands. The Dutch political system is unique and plays a large role when it comes to social movement effectiveness.

5.2 Discussion on methodology

The applied methodology to determine climate policy positions to show a change in public climate support was later determined to be inefficient. This research could provide a more tactful way by using a combination of other sources to provide this scale of climate policy positions. However, highlighted in Annex 1, existing scales focused on the broader topic of environmental policy. This research focused on climate policy, as climate action was also the main focus of the 2019 climate protests. However, the time it took to analyse all party manifestos in order to rank them based on climate policy positions, could have been tackled differently. Also, it can be argued whether this ranking needed to be this detailed, as it was only a means to an end. Which, in this case, was being able to show a change in public support for pro-and anti-climate parties. The time saved by using a different method could have been used to dive even deeper into the understanding of why the climate protests lacked impact.

5.2.1 Party policy positions

It can be argued whether party manifestos are the "real" party's policy positions and representable enough. In the past (and present), political parties often do not adhere to all points made in their manifesto, and they can deviate from it at any point in time as these manifestos are not binding. Nevertheless, these manifestos are the official documents presenting (usually) detailed policy positions published by the party's themselves, not someone else's interpretation. Within the Netherlands, most people gain their intel on political parties through these manifestos. The nationally well-known 'kies wijzers' (election compasses) are also based on the policy positions represented in these manifestos. This shows that these manifestos are among the main sources people base their political intel on during election times. Therefore, they provide a reliable source of information representing a party's general position and people's support on these policy positions. Also, when political parties do deviate from the manifestos, they lose public support (support from their voters), as they broke their promises (Laver & Garry, 2000).

The original methodology on coding party manifestos to determine policy positions by Carter et al. (2018) included a calculation in determining the total of pro-and anti-climate quasi-sentences and determined the party's climate policy position based on subtracting the total anti-climate measures from the total pro-climate measures. A major shortcoming of this method is that it discriminates between the intensity of proposed climate policies within the different manifestos. For example, one policy could have a much larger impact than another, but they would both be count as a single 'pro-climate' measure. To counter this problem, it was chosen to go with a more qualitative analysis of the party manifestos and base the rankings on the more general statements and climate policies the party's provided in their manifestos. To determine the 'real' climate outcome of a party manifesto and rank the parties based on the amount of GHG emissions their climate policy plans would reduce, every party manifesto needs to be calculated. This was outside the scope of this research. PlanBureau voor de Leefomgeving (PBL) made such a calculation (see PBL, 2021). However, they did not do this for all parties, only those who shared their detailed info. The VVD, which is the largest party in parliament, did not share their detailed climate numbers with PBL and was not included in their calculation. This information is therefore unable to compare the climate policy plans of all parties in parliament. It would be interesting to see if the same calculation used for the parties PBL investigated could also be applied to all other parties to make a legitimate comparison of the different manifestos.

5.2.2 Public opinion

A problem with finding a trend in public opinion through national polls is due to the inconsistency of these polls. Over the years, questions between opinion polls on climate concern have slightly changed, making them hard to compare or provide a valid trend (Brulle et al., 2012). Also, these polls are at irregular intervals held. Several polls presented in the Netherlands have an inconsistency in the wording of the questions, ranking of the answers, and sometimes have several years between polls that use the same questionnaire. Conducting an accurate empirical analysis on a change in climate opinion requires several years of polling, using the same worded questions, and having the same time intervals in between (Brulle et al., 2012). This is especially a problem with the short period presented in this research. However, to show an effect of the climate protests, a short time period is needed to rule out other factors that might have influenced public climate concerns over the years. This research applied all available opinion poll data in the Netherlands to show a trend in public opinion. To show a valid trend, only data that applied the same method and questionnaire could be used, as a comparison between differently formulated questions makes the trend illegitimate. This significantly reduced the amount of available data. Therefore, it was chosen to include another form of measuring public opinion through the voting polls.

Determining public opinion through election polls and party positions do come with limitations. As climate action is just one piece of what parties stand for. However, due to the specific political system in the Netherlands, elections are an ideal and accurate way of showing public opinion. There is a wide range of different political parties representing the parliament. Due to the high amount of parties, these parties have very specific ideas on climate change, which differ quite largely from one another. Brooker & Schaefer (2015) also highlight how elections, in this case, election polls, provide a good overview of how the general public expresses their feelings on certain policy issues. However, this method does lack a certain precision. Nevertheless, the political parties that are chosen by the public to represent our greater beliefs are also those that make and implement the policies. If a larger amount of the public believe that climate change is a very important issue but does not vote on parties representing their concerns, climate change would not be addressed on a national scale. Because if the parliament were represented by only parties that are against climate mitigation action, no national climate action would be present. The I&O research report did show in one of their polls that the larger part of Dutch society (67%) does include their beliefs climate concern into their voting behaviour (I&O Research, 2021).

It should also be taken into account that a large part of the protests researched here was joined a younger audience. The used public opinion polls, and political election polls, were only answered by adults (18+). This shows the limitation that a part of those joining these protests is not (yet) representing national climate opinion in these polls. This creates the possibility that when all protesters have become adults in a few years, a shift in national climate opinion occurs. The period in this research was quite low, while a change in public opinion could take several years to develop. Also, the climate protests 2019 could have had a significant effect on climate opinion among youth. This was not researched but could have a significant impact on climate policy in the next few years.

6 Conclusion

This research was set out to determine to what extent the series of climate protests in 2019 affected climate policies in the Netherlands and explain these (lack of) changes. Regarding the type of democracy and electoral formula present in the Netherlands, public opinion plays a large role in creating climate policies. Therefore public opinion was added as one of the leading indicators to explain this change in national climate policies. Changes in climate policy were determined by analyzing legislative activity during and after the 2019 climate protests. This research applied existing public opinion polls and a combination between voting polls and party's climate policy positions to determine changes in national climate opinion. The latter provided insights on public opinion through voting patterns on climate related issues treated in party's manifesto. To explain the role of the 2019 climate protests in causing a (lack of) change in national climate policy and opinion, these climate protests were analyzed through a set of indicators that determine their effectiveness. These indicators were mainly derived from social movement theory and political opportunity theory. The protests' characteristics were analyzed through a media analysis. Overall, exploring the extent to which climate protests affect national policy and opinion contributes to the body of literature and theoretical debate on the effectiveness of climate protests. The amount and magnitude of climate protests have increased rapidly over the last decade. Understanding their effects and the conditions under which they are effective is crucial to determine if the time invested in them is not better invested elsewhere.

The first findings showed no link between changes in national climate policies linked and the 2019 climate protests. There were some crucial changes found in national climate policies in 2019. However, the findings suggest that the series of climate protests did not cause these. This is not something unexpected, as theory and empirical research by other scholars on the capabilities of climate protests to affect policy both showed that climate protests do not cause immediate policy changes. However, the finding that the climate protests were not mentioned anywhere in the legislative activity (except for one set of parliamentary questions) was unexpected. Especially due to the newly formed levels of magnitude that these climate protests included, magnitudes that were on a national and global scale never seen before.

The second set of findings focused on a change in national climate opinion in the Netherlands. This research also did not show a link between changes in public climate concern or beliefs on climate responsibility (responsibility to what extent the government is responsible) and the 2019 climate protests. The analysis indicated that the protests had no positive effect on climate concerns and did not positively affect people believing that the National government should do more about this problem. Analyzing voting behaviour based on the party's climate policy position also showed no link with the climate protests. There were fluctuations in voting behaviour. However, they were not linked to the climate protests. This research showed that the climate protests had no positive effect on the number of votes allocated towards pro-climate parties represented in parliament. Literature suggests that protests are able to steer public opinion. This was not found in this research. However, it must be taken into account that this research only analyzed a change in public opinion on the aggregate level. It did not look into a change in beliefs on the individual or group level. Therefore it cannot be said that the 2019 climate protests did not affect public opinion of any kind.

The last set of findings focused on explaining the previously stated impact of the 2019 climate protests on national climate policies and opinions. In regards to timing, the protests were found to be at a disadvantage due to their timing. As noted in the literature, election times are the most effective time periods for climate movements and protests to make an impact. This series of climate protests was two years before the 2021 parliamentary elections. In regards to the climate protests' magnitude, they were found bigger than ever before. Literature suggests that newly increased magnitudes, and in

general an increase in magnitudes of social movements, increase the movement's ability to cause change. Comparing the magnitude of protests in the Netherlands with some other European countries, it was much lower (% of total population protesting). This research does not implicate that the lack of magnitude is why there was no change in public opinion found. However, to ultimately determine the role magnitude plays in climate protests, more research is needed. The level of disruption seen in the series of climate protests examined was low. None of the protests showed any high levels of disruption. There were other climate protests present during the same period that did cause high levels of disruption. The exact effect these protests have had on the total goal, which is more climate action and awareness, is unclear. The series of climate protests were also analyzed in their provision of feasible targets and solutions. This was done by looking at the targets and solutions proposed by the main organizers. These targets and solutions were found to be very modest. This modesty could be an explanation of the lack of impact. However, the earlier protests did demand an industry-wide carbon tax implementation, which was later implemented into the national climate agreement. It should not go unnoticed that more people are demanding certain targets and providing solutions within these protests. Not only the main organizers. However, it was outside the scope of this research to analyze individual demands or demands made by other groups active in these protests. At last, the analysis of the presence of political allies showed that the majority of parliament showed support for the two larger protests (March 10 and September 27). On the smaller protests, there was less support shown. It was also seen that the level of support per political party was relatively equal to their climate policy position. The parties that were considered most pro-climate based on their manifestos were also the parties showing the most support. A possible 'lack of political allies' is not considered the reason why there was no change observed.

It should be reminded that climate protests are only one of the tools that social movements apply to cause a change in the status quo. Protests on their own do, according to multiple scholars, not have the power to cause a change in policy and national opinion single-handedly. Therefore, it could be the case that the protest did play their role correctly in the overarching instrument known as the 'climate movement'. To determine the exact role climate protests played in this large entity of climate movements, other aspects of these movements, such as lobbying and problem framing, need to be analyzed.

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Appendix 1 Determining climate policy positions through party manifestos

Party manifestos, also known as election programs, refer to official strategic documents released by political parties and act as their core source of information to represent their political beliefs to the public. These manifestos are often released pre-election times to inform the public about their policy positions on numerous issues. Analyzing these manifestos and deriving policy positions of these key actors is fundamental when it comes to the analysis of political competition (Laver & Garry, 2000). The Manifesto Research Group (MRG) understands manifestos as parties' only authoritative policy statements and, therefore, as indicators of the parties' policy preferences at a given point in time' (Werner et al., 2011: 2). These manifestos are usually publicly available, provide party's official policy preferences, and do not contain cheap talk (Carter et al. 2018).

Analyzing party's policy positions can be done through multiple streams. For example by analyzing political debates and content analysis of policy documents, or by surveys of politicians (members of certain parties) and political scientist. However, party manifestos provide a clear overall picture of a party's policy positions, and is therefore the ideal source of information (Laver & Garry, 2000). This does mean that political parties are seen as a unitary actor, hence, members of these parties stand behind their manifestos, and their ideals do not deviate from the party's core policy positions. Due to the fact that these manifestos are official published party documents, party members have difficulty to resile from the presented policy positions (Laver & Garry, 2000).

Within the Netherlands, party manifestos have been researched on multiple occasions. This usually results into the typical political scale of left-right and progressive-conservative. Left-wing parties support a more significant role for the government to achieve an equal distribution within society, while right-wing parties want to limit that role (PDC, n.d.). The right-wing aims for fewer business regulations and sees social inequality as something unavoidable (Unifrog, n.d.). The other axe is an addition to the right-left layout, where progressive stands for more social change or reform policies and conservative for a more traditional course (PDC, n.d.). When a party is mostly right-winged, this does not mean that they think conventionally on all standpoints or topics. There are also parties more centrum based parties, which adopt both right- and left-wing standpoints. Parties with radical beliefs on specific issues are named extreme right or extreme left. For this research, it is essential to know where the parties with pro-environmental beliefs stand. Therefore right-left progressive-conservative scale is considered to be too 'general' and simplified. Especially as this research aims to rank parties based on their climate policy positions only. In order to compare the parties, it is not only important to analyze their emphasis on climate policies, but also on the degree in which they are in favor or against climate action.

One way to analyze party manifestos is through coding. The Manifesto Research Group (MRG) is one of the leading communities that is an expert on collecting and coding election programs with the aim to estimate policy preferences of political parties (Volkens, 2002). According to Laver & Garry (2000), the MRG measures the relative emphasis placed by a party on certain issues, not the party's substantive position. The difference between the two is that party's could have totally different substantive positions on certain issues, but put the same amount of emphasis on it. Also, the MRG coding scheme does not provide bipolar coding categories on climate issues. Meaning they do not have anti-climate categories (such as climate change denialism). Laver & Garry (2000) provide a method where political texts are analyzed to estimate the position (PC) of some party (P) on climate policy concerns (C). and eventually rank them against each other. The amount of 'pro' text units (C_{pro}), minus

the number of 'anti' (C_{anti}) text units will show the party's position on climate policy. The higher the score, the more the party is in favor of climate polities.

The method by Laver & Garry (2000) similar to that of Carter et al. (2018), who provided a systematic, general approach to measure climate policy preferences of political parties. This approach is centered around coding party manifestos. Their coding scheme is build on existing research on parties' climate policy positions and tackles the cross-cutting and multisectoral issue of climate change. This allows the researcher to develop a positional indicator of parties' climate policy preferences. Applying this coding scheme does include the fixed assumption that GHG emissions are the central outcome of climate policy (Carter et al., 2018). A detailed exploration on the applied code scheme is shown in methodology chapter of this research. The coding scheme by Carter et al. (2018) focusses specifically on climate policy, those that reduce GHG, excluding other 'environmental' or 'sustainability' issues such as water quality, animal rights, and others. This is in line with the research presented here, as the climate protests under research also focused specifically on climate related issues (reducing GHG emissions). Carter et al. (2018) also added a set of document attributes to their manifesto examinations. These included an **acknowledgement of the climate crisis**, if the **party commits to climate change targets**, if **climate change is mentioned in the manifesto's front manner**, and **the number of times climate change is mentioned**. Their research showed strong evidence that these document attributes relate to the parties general policy preferences.

Applying a calculation as used by Laver & Garry (2000) and Carter et al. (2018) does come with its limitations. As this method discriminates between the intensity of proposed climate policies within the different manifestos. For example, one policy could have a much larger impact than another, but they would both be count as a single 'pro/anti-climate' measure. It is highlighter by multiple scholars that 'counting' codes in qualitative research could be considered misleading (Maxwell, 2010; Hannah & Lautsch, 2011). Counting the data could be used as a general measure to show which parties support a certain policy field (e.g. which parties support lower carbon energy measures). However, when one party mentions this support 20 times, and another party mentions it 2 times in their manifesto, there should be no difference made in the level of support (Maxwell, 2010). Especially because these manifestos sometimes differ largely in magnitude (e.g. CU: 141 pages / 50PLUS: 22 pages). Applying this counting mechanism on party manifestos does not provide a reliable representation on the extend to which parties are either pro- or against climate mitigation measures.

Appendix 2 Coding method

CODE SCHEME

- Pro climate policies
 - *Acknowledging the climate crisis*: Statements that acknowledge the existence of a climate crisis
 - *Pro-environment*: General statements in favor of the environment. These include pro-environment, pro-sustainable development, pro-green growth, demanding more governmental attention towards the climate, Pro-general climate action, pro-use of environmental indicators
 - *Pro-lower carbon energy*: Pro-renewable energy, pro-reducing fossil fuels. (Take into account: this is considered ‘pro’ when an new energy system is proposed which lowers carbon emissions. E.g. from coal to gas, or gas to nuclear). (Feasibility of these energy sources are not taken into account)
 - *Pro-climate tax*: Statements that support climate taxes, or the polluter pays principle
 - *Pro-energy efficiency*: Pro-renewable housing/building, pro-sustainable water and waste use
 - *Pro-lower carbon transport*: Pro-sustainable ways of transport (both public and private), including lowering transport distances (producing/using nationally) and decreasing transport by fossil fuel means of transportation.
 - *Pro-carbon sinks*: Pro-forestry, pro-wetlands, pro-conserving green spaces
 - *Pro-other climate policies*: Policies not mentioned above, but considered sustainable development
 - (NON-CORE CATEGORIES):
 - *Waste*: pro-climate content in regards to the waste cycle
 - *Agriculture and food*: Pro-measures to protect environment in agriculture and food production
 - *Anti-growth*: Explicitly mentioning climate conservation is more important than economic growth
- Anti climate policies
 - *Climate denialism*: Statements that include a denial of a climate crisis, or other denials such as the nitrogen crisis and the so-called “insignificant” impact the Netherlands will have
 - *Anti-climate taxes*: Against every form of tax that would reduce GHG emissions (carbon tax, meat tax, higher fly taxes, etc.)
 - *Pro-aerospace and shipping industry*: Statements that support a growth in the shipping and aerospace industry
 - *Anti-carbon sinks*: Outweighing the building of roads, housing, and other industry over the preservation of green spaces. (converting green into grey)
 - *Pro-fossil fuels*: Pro-fossil fuel extraction, against replacing fossil fuels by renewables (or nuclear)
 - *Anti-other climate policies*: Policies not mentioned above, but considered against sustainable development
 - (NON-CORE CATEGORIES):
 - *Agriculture*: explicitly in favor of GHG-intensive agriculture, or other forms of intensive farming
 - *Anti-regulation*: The party is aiming for less climate regulations

- *Pro-growth*: statements that highly emphasize the need for economic growth (which results in more climate impact). Green growth is not seen as anti-climate

CODING STEPS

THEMES:

Pro-climate policies

- Acknowledging the climate crisis
 - YES/NO
- Pro- environment
 - Pro-sustainable development
 - YES/NO
 - Pro-green growth
 - YES/NO
 - Demanding more governmental action towards the climate
 - YES/NO
 - Pro-use of environmental indicators
 - YES/NO
- Pro-lower carbon energy
 - Pro-renewable energy
 - YES/NO + WHAT % OF THE TOTAL ENERGY MIX SHOULD BE RENEWABLE AT WHICH YEAR
 - Pro-reducing fossil fuels (Feasibility of energy sources are not taken into account, and going from coal to gas is considered pro-climate)
 - YES/NO
- Pro-climate tax
 - Supports national climate tax
 - YES/NO + HOW HIGH ARE THESE TAXES?
 - Supports polluter pays principle
 - YES/NO
- Pro-energy efficiency
 - Pro-renewable housing/building
 - YES/NO
- Pro-lower carbon transport
 - Pro-increasing sustainable ways of transport (public transport, electric, cycling)
 - YES/NO
 - Pro-lowering commercial flying
 - YES/NO
 - Pro-decreasing transport distances (producing/using resources nationally/reduce import)
 - YES/NO
 - Pro-decreasing transport by fossil fuel means of transportation
 - YES/NO

- Pro-carbon sinks
 - Pro-forestry (increasing amount of trees)
 - YES/NO
 - Pro-wetlands (increasing amount of wetlands)
 - YES/NO
 - Pro-conserving of green spaces (weighing green spaces over industrial needs)
 - YES/NO
- (Pro Non-core categories)
 - Waste
 - Pro-creating a circular waste cycle
 - YES/NO
 - Pro-increasing lifespan of products
 - YES/NO
 - Agriculture and food
 - PRO-lower carbon agriculture
 - YES/NO
 - Anti-growth
 - Explicitly mentioning climate conservation is more important than economic growth
 - YES/NO

Anti-climate policies

- Climate denialism
 - Denial of a climate crisis
 - YES/NO
- Anti-climate taxes
 - Against all forms of climate tax that would reduce GHG emissions
 - YES/NO
- Pro-aerospace and shipping industry
 - Supports a growth in the shipping and aerospace industry, including in quantity
 - YES/NO
- Anti-carbon sinks
 - Outweighs the importance of new roads, housing, and other industry over nature areas and green spaces
 - YES/NO
- Pro-fossil fuels
 - Pro fossil fuel extraction and usage
 - YES/NO
 - Against renewable energy sources
 - YES/NO
- (Anti Non-core categories)
 - Agriculture
 - Explicitly in favor of intensive forms of agriculture or other forms of intensive farming
 - YES/NO
 - Anti-regulation
 - Party aims for less climate regulations

- YES/NO
- Pro-growth
 - Emphasizes the need for economic growth (which results in more climate impact)
- YES/NO

CODING OUTCOME

	VVD	PVV	CDA	D66	GL	SP	PvdA	CU	PvdD	50Plus	SGP	DENK	FvD
Acknowledging the climate crisis													
Acknowledges the existence of a climate crisis	YES	NO	YES	YES	YES	YES	NO						
Pro- environment													
Pro-sustainable development	YES	NO	YES	YES	YES	YES	NO						
Pro-green growth	NO	NO	YES	YES	YES	YES	NO						
Demanding more governmental action towards the climate	NO	NO	NO	YES	YES	YES	YES	YES	YES	YES	NO	NO	NO
Pro-use of environmental indicators	NO	NO	YES	NO	NO	NO	NO						
Pro-lower carbon energy													
Pro-renewable energy	YES	NO	YES	YES	YES	YES	YES	YES.	YES.	NO	YES	YES.	NO
Pro-reducing fossil fuels	YES	NO	YES	YES	YES	YES	YES	YES	YES.	NO	YES	YES	NO
Pro-climate tax													
Supports national climate tax	YES	NO	NO	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO
Supports polluter pays principle	YES	NO	NO	YES	YES	YES	YES	YES	YES	NO	NO	YES	NO
Pro-energy efficiency													
Pro-renewable housing/building	NO	NO	YES	NO	YES	NO	NO						
Pro-lower carbon transport													
Pro-increasing sustainable ways of transport (public transport, electric, cycling)	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES
Pro-lowering commercial flying	NO	NO	NO	YES	YES	YES	YES	YES	YES	NO	YES	NO	NO
Pro-decreasing transport distances (producing/using resources nationally/reduce import)	NO	NO	YES	NO	NO	NO	YES						
Pro-decreasing transport by fossil fuel means of transportation	NO	NO	YES	NO	NO	NO	NO						
Pro-carbon sinks													
Pro-forestry (increasing amount of trees)	YES	YES	YES	YES	YES	YES	YES	YES	YES	NO	YES	YES	YES
Pro-wetlands (increasing amount of wetlands)	NO	NO	NO	YES	YES	NO	NO	NO	YES	NO	NO	NO	NO
Pro-conserving of green spaces (weighing green spaces over industrial/housing needs)	NO	NO	YES	NO	NO	NO	NO						
(Pro Non-core categories)													
Pro-creating a circular waste cycle	YES	NO	YES	YES	YES	YES	NO						
Pro-increasing lifespan of products	YES	NO	NO	YES	YES	NO	YES	YES	YES	NO	YES	NO	NO
PRO-lower carbon agriculture	YES	YES	NO	YES	YES	YES	YES	YES	YES	YES	YES	NO	NO
Explicitly mentioning climate conservation is more important than economic growth	NO	NO	NO	YES	YES	NO	NO	YES	YES	NO	NO	YES	NO
TOTAL PRO-CLIMATE	11	3	13	21	21	19	19	20	21	6	13	10	3
Climate denialism													
Denying the existence of a climate crisis	NO	YES	NO	NO	NO	NO	YES						
Anti-climate taxes													
Against all forms of climate tax that would reduce GHG emissions	NO	YES	NO	NO	NO	NO	YES						
Pro-aerospace and shipping industry													
Supports a growth in the shipping and aerospace industry, including in quantity	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Anti-carbon sinks													
Outweighs the importance of new roads, housing, and other industry over nature areas and green spaces	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
Pro-fossil fuels													
Pro fossil fuel extraction and usage	NO	YES	NO	NO	NO	NO	YES						
Against renewable energy sources	NO	YES	NO	NO	NO	NO	YES						
(Anti Non-core categories)													
Explicitly in favor of intensive forms of agriculture or other forms of intensive farming	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Party aims for less climate regulations	YES	YES	YES	NO	NO	NO	NO	NO	NO	NO	YES	NO	YES
Emphasizes the need for economic growth (which results in more climate impact)	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO	NO
TOTAL ANTI-CLIMATE	4	6	2	0	0	0	0	0	0	1	1	0	6

*NO is also written when the party did not mention anything about it.

NIVIVO CODING OUTCOME

	VVD	PVV	CDA	D66	GL	SP	PvdA	CU	PvdD	50Plus	SGP	DENK	FvD
Pro climate policies													
<i>Acknowledging the climate crisis</i>	1		1	1	1	1	1	1	1	1	1	1	
<i>Pro-environment</i>	2		3	3	2	3	2		1			1	
<i>Pro-lower carbon energy</i>	8	2	6	15	13	5	8	6	14		11	4	2
<i>Pro-climate tax and subsidies</i>	6			12	6	2	7	9	8		4	2	
<i>Pro- energy efficiency</i>	2		5	6	4	1	1	4	7		3		
<i>Pro-lower carbon transport</i>	9		6	11	10	6	8	15	14		4	2	1
<i>Pro-carbon sinks</i>	4	1	5	12	8	4	7	9	11		5	1	1
<i>Pro-other climate policies</i>	2		3	9	9	1	5	11	11		3	1	
<i>Pro-lowering meat consumption</i>				1	1	1	1		1				
<i>Specific (pro) climate targets</i>	2			5	4		4	4	5			1	
<i>Waste</i>	1		4	7	5	5	3	8	6		6	1	
<i>Agriculture and food</i>	7	1	5	4	5	1	3	3	1	1	3	1	
<i>Anti-growth</i>							3	2	3			1	
Total pro	44	4	38	86	68	30	53	72	83	2	40	16	4
Anti climate policies													
<i>Climate denialism</i>		3											3
<i>Anti-climate taxes</i>	2	6	1								2		5
<i>Pro-aerospace and shipping industry</i>	2		1										1
<i>Anti-carbon sinks</i>	3		2										1
<i>Pro-fossil fuels</i>	1	6	1				1				5		7
<i>Anti-other climate policies</i>	3	4								2	5	2	4
<i>Anti-loweing meat consumption</i>	1	1											1
<i>Anti-national climate agreements/goals/etc.</i>		5											4
<i>Agriculture</i>													
<i>Pro-growth</i>	4												
<i>Anti-regulation</i>		1											1
Total anti	16	26	5	0	0	0	1	0	0	2	12	2	27

beperven van afval, waarmee het verdienvermogen van onze economie wordt versterkt. We werken toe naar een circulaire economie en zullen onze mobiliteit, woningbouw en landbouw verder moeten verduurzamen. Want onze mobiliteits- en transportsector is nog vooral gebaseerd op fossiele brandstoffen. Woningen en kantoren kunnen duurzamer verwarmd en beter geïsoleerd worden. En innovatie biedt de land- en tuinbouwsector mogelijkheden om binnen onze schaarse ruimte te ondernemen. Het principe van 'de vervuiler betaalt', zal steeds vaker terugkomen. De afgelopen jaren zijn eerste stappen gezet naar verduurzaming, bijvoorbeeld door het stimuleren van emissieloos vervoer en laadinfrastructuur. Ook zijn eerste ervaringen opgedaan met het verduurzamen van wijken. Daar willen we in een verantwoord en betaalbaar tempo mee doorgaan. De komende jaren zetten we in op:

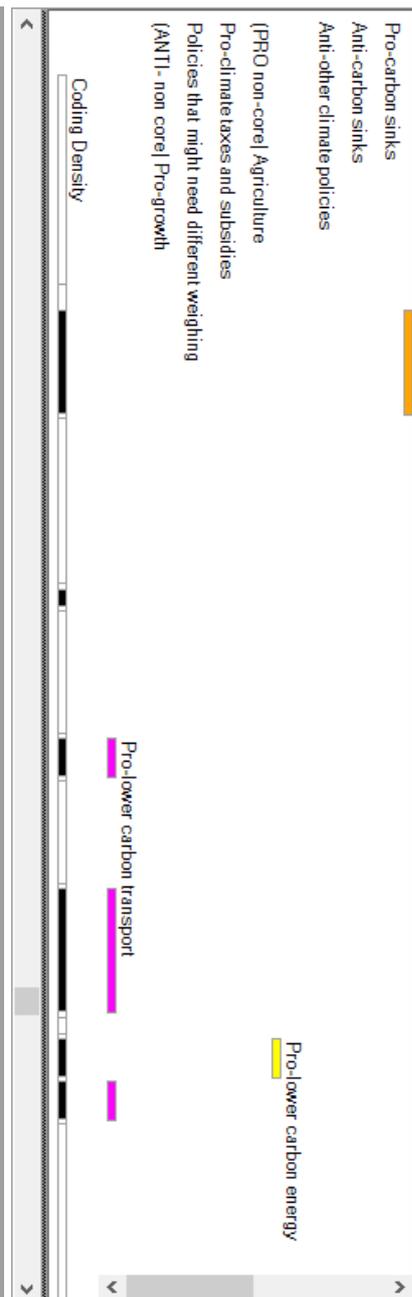
- ▶ Het bevorderen van hoogwaardige recycling, hergebruik en langer productgebruik door onder andere meer experimenteerruimte in wet- en regelgeving te creëren, begrippen en regels omtrent afval te vereenvoudigen, samen te werken met het bedrijfsleven om bijvoorbeeld materiaalketens te sluiten, afvalstort en -verbranding waar mogelijk uit te faseren en op Europees niveau verdere eisen te stellen aan verpakkingen, materialen en producten.
- ▶ Behoud van de sterke positie van economische clusters zoals de Nederlandse havens, door samen met hen te bekijken wat nodig is in de verduurzamingsopgave, bijvoorbeeld door het opstellen van transitieplannen.
- ▶ Op Europees niveau geleidelijk stoppen met het gebruik van niet-essentiële, gevaarlijke stoffen, zoals PFAS. Stoffen worden niet zonder wetenschappelijk bewijs dat zij schadelijk zijn voor mens en milieu genormeerd of verboden.
- ▶ Stimuleren van bedrijven om te innoveren door voor CE-bedrijfsmiddelen aan te sluiten bij de Milieu Investeringsaftrek (MIA) en de Willekeurige afschrijving milieu-investeringen (Vamil).
- ▶ Stimuleren van duurzame en circulaire inkoop van producten en diensten. De milieu-kostenindicator (MKI) kan daarbij als meetinstrument worden ingezet om te beoordelen wat de milieueffecten van een dienst, levering of werk zijn.
- ▶ In Europees verband bekijken welke mogelijkheden er zijn om innovatieve technieken zoals elektrisch kraken, waterstof, bioplastics en een thoriumreactor te stimuleren.

Verduurzaming mobiliteit en transport

- ▶ Aanscherping van de (Europese) normen voor de uitstoot van CO₂ (g/km) door personenauto's, bestelbussen en vrachtwagens. Dit dwingt fabrikanten te investeren in schonere motoren.
- ▶ Afschaffen van de vrijstelling voor accijns op kerosine in internationaal verband. De vliegbelasting voor vluchten vanaf Nederlandse luchthavens blijft tot dat geregeld is in stand. We beschermen de hubfunctie van Schiphol, ook bij toekomstige ontwikkelingen. Bijvoorbeeld door overstappers uit te zonderen. Wanneer er goede internationale afspraken zijn gemaakt, vervalt de nationale vliegbelasting.
- ▶ Een Europese bijmengverplichting voor duurzame luchtvaartbrandstoffen. Indien deze bijmengverplichting op Europees niveau niet haalbaar blijkt, volgen er nationale maatregelen, zoals de mogelijkheid om op Nederlandse luchthavens bio- of synthetische kerosine te tanken.
- ▶ Investeren in het elektrisch taxiën van vliegtuigen op Nederlandse luchthavens, het schaalbaar maken van synthetische kerosine en andere innovaties om de uitstoot van CO₂ en andere schadelijke stoffen te verminderen. Ook wordt onderzocht of glijvluchtlandingen vaker kunnen worden toegepast.
- ▶ Investeren in walstroomvoorzieningen in Nederlandse zeehavens om de uitstoot van CO₂ en andere schadelijke stoffen te verminderen op het moment dat schepen aangemeerd liggen.
- ▶ Subsidiereregelingen voor schonere motoren voor de binnenvaart. Duurzame binnenvaartschepen behouden het recht op korting voor havengelden. Varend ontgassen door binnenvaarttankschepen is verboden. We faciliteren ontgassen via ontgassingsinstallaties.
- ▶ Investeren in Clean Energy Hubs voor de binnenvaart. Hier kunnen binnenvaartschepen alternatieve energiebronnen zoals waterstof bunkeren en batterijen opladen. Op termijn kan dit, indien mogelijk en rendabel, worden uitgebreid naar de zeevaart.

Verduurzaming gebouwde omgeving

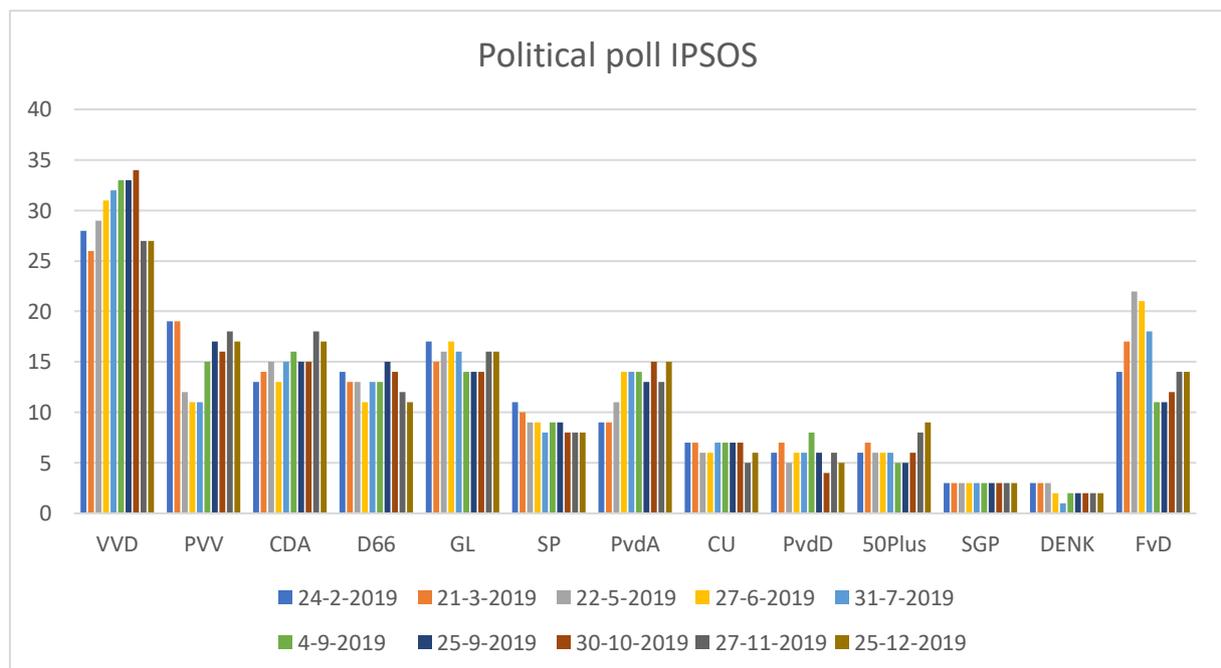
- ▶ Tegengaan van hogere woonlasten als gevolg van verduurzaming. Gemeenten maken per wijk



Appendix 3 Voting poll data

IPSOS

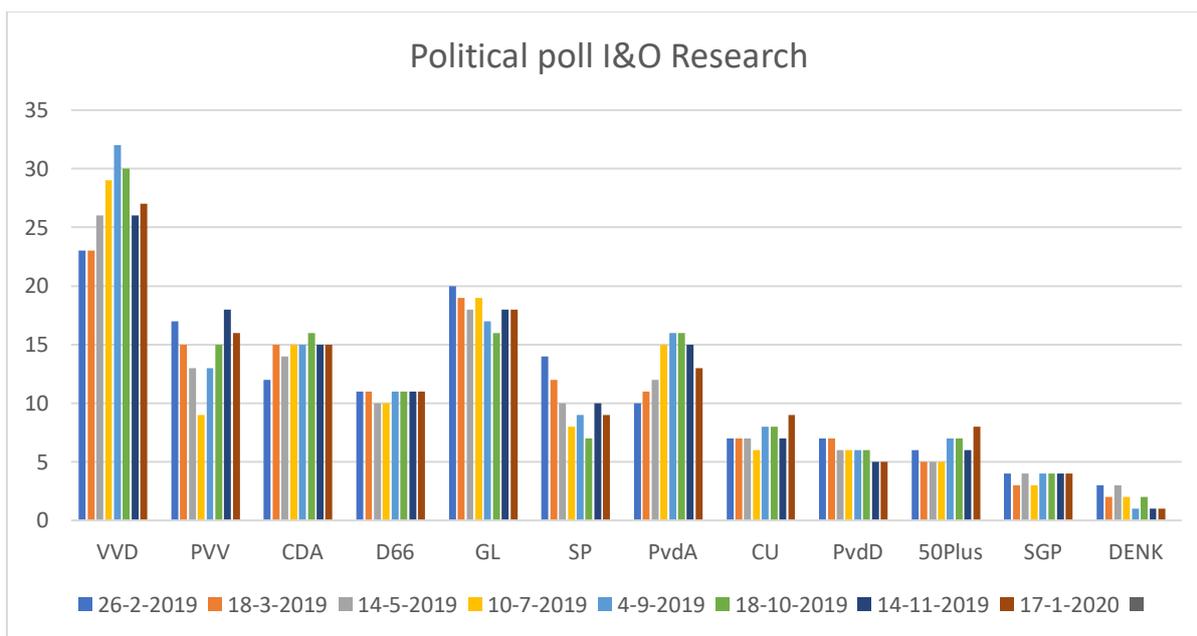
	24-2-2019	21-3-2019	22-5-2019	27-6-2019	31-7-2019	4-9-2019	25-9-2019	30-10-2019	27-11-2019	25-12-2019
VVD	28	26	29	31	32	33	33	34	27	27
PVV	19	19	12	11	11	15	17	16	18	17
CDA	13	14	15	13	15	16	15	15	18	17
D66	14	13	13	11	13	13	15	14	12	11
GL	17	15	16	17	16	14	14	14	16	16
SP	11	10	9	9	8	9	9	8	8	8
PvdA	9	9	11	14	14	14	13	15	13	15
CU	7	7	6	6	7	7	7	7	5	6
PvdD	6	7	5	6	6	8	6	4	6	5
50Plus	6	7	6	6	6	5	5	6	8	9
SGP	3	3	3	3	3	3	3	3	3	3
DENK	3	3	3	2	1	2	2	2	2	2
FvD	14	17	22	21	18	11	11	12	14	14



I&O Research

	26-2-2019	18-3-2019	14-5-2019	10-7-2019	4-9-2019	18-10-2019	14-11-2019	17-1-2020
VVD	23	23	26	29	32	30	26	27
PVV	17	15	13	9	13	15	18	16

CDA	12	15	14	15	15	16	15	15
D66	11	11	10	10	11	11	11	11
GL	20	19	18	19	17	16	18	18
SP	14	12	10	8	9	7	10	9
PvdA	10	11	12	15	16	16	15	13
CU	7	7	7	6	8	8	7	9
PvdD	7	7	6	6	6	6	5	5
50Plus	6	5	5	5	7	7	6	8
SGP	4	3	4	3	4	4	4	4
DENK	3	2	3	2	1	2	1	1
FvD	16	20	22	23	11	12	14	14



PEIL.NL

	3-3-2019	16-3-2019	14-4-2019	15-9-2019	22-9-2019	29-9-2019	20-10-2019	24-11-2019	22-12-2019
VVD	23	22	22	28	28	28	27	24	19
PVV	17	15	8	14	15	15	17	18	19
CDA	10	10	15	16	16	16	15	14	15
D66	9	11	11	11	11	11	13	13	12
GL	18	17	18	14	13	13	12	13	12
SP	12	12	9	9	9	9	9	8	9
PvdA	14	12	13	19	20	20	20	20	19
CU	7	7	7	6	6	6	6	6	7
PvdD	8	7	8	7	7	7	4	4	6
50Plus	5	5	4	6	6	6	7	7	7
SGP	3	3	2	2	2	2	2	2	3
DENK	7	7	4	3	3	3	3	3	3

FvD	17	20	28	14	13	13	14	17	18
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Kantar Public

	12-2-2019	25-4-2019	15-9-2019	15-10-2019	15-11-2019
VVD	28	27	26	31	30
PVV	18	11	15	15	18
CDA	14	11	14	12	12
D66	14	10	12	11	10
GL	17	19	18	16	17
SP	13	8	10	7	9
PvdA	9	12	13	16	16
CU	8	8	8	8	8
PvdD	4	6	7	6	7
50Plus	6	6	9	9	6
SGP	3	2	4	3	4
DENK	2	2	1	3	1
FvD	14	28	13	13	12

Appendix 4 Media Analysis

Title	Publication date	Author	Data type	Source
'Dit moeten we ook doen', na België ook klimaatmars in Nederland	24-1-2019	n.a.	News article	NOS
Wiebes haalt uit naar klimaatpijelaars	1-2-2019	n.a.	News article	De Telegraaf
Opkomst klimaatmars veel groter dan verwacht: 'Jullie schudden Den Haag wakker'	7-2-2019	R. Samsom	News article	AD
Stijn (17) organiseert klimaatstaking: 'Het mag geen GroenLinks-dag worden'	7-2-2019	A. van Dongen	News article	AD
'Klimaatpijelaars willen gewoon een dagje vrij'	7-2-2019	n.a.	News article	De Telegraaf
Klimaatpijelaars: 'Ik vlieg 3 keer per jaar'	7-2-2019	n.a.	News article	De Telegraaf
Klimaatpijelaars los bij McDonald's	7-2-2019	n.a.	News article	De Telegraaf
Duizenden klimaatpijelaars lopen protestmars door Den Haag	7-2-2019	n.a.	News article	NOS
Klimaatpijelaars: 'Volgende week willen we jullie weer zien'	7-2-2019	n.a.	News article	NOS
Rutte tegen jongeren: 'We doen al veel aan klimaat, vraag niet meer'	7-2-2019	n.a.	News article	NOS
FvD heeft 'geen spijt' van hoaxfoto klimaatpijelaars McDonalds Tilburg: 'Hoe konden wij dit nou weten?'	9-2-2019	S. Quekel	News article	AD
Klimaatpijelaars op 14 maart weer naar het Malieveld	13-2-2019	n.a.	News article	NOS
Klimaatpijelaars protesteren 14 maart op de Dam in Amsterdam	26-2-2019	n.a.	News article	NU.nl
Studenten houden Limburgse klimaatmars	5-3-2019	Bern Opdenacker	News article	1Limburg
Tienduizenden mensen bij klimaatmars in Amsterdam	10-3-2019	n.a.	News article	ANP/Het Parool
Ondanks de regen topdrukte in Amsterdam voor klimaatmars	10-3-2019	n.a.	News article	De Telegraaf
Tienduizenden mensen bij klimaatmars in Amsterdam	10-3-2019	n.a.	News article	Het Parool
Klimaatmars trekt ondanks regen zo'n 40.000 mensen	10-3-2019	n.a.	News article	NOS
Tienduizenden mensen lopen mee met Klimaatmars in Amsterdam	10-3-2019	n.a.	News article	NU.nl
Regen hindert de klimaatmars niet, 40.000 demonstranten trekken door Amsterdam	10-3-2019	Esther Bijlo	News article	Trouw
Honderden 'klimaatpijelaars' op de been	14-3-2019	n.a.	News article	De Telegraaf
Scholieren lopen tweede mars voor het klimaat in Amsterdam	14-3-2019	n.a.	News article	NOS

Weer wereldwijde klimaatprotesten	15-3-2019	n.a.	News article	De Telegraaf
Klimaatspijbelaars wereldwijd de straat op	15-3-2019	n.a.	News article	NOS
Opnieuw spijbelen voor het klimaat	24-5-2019	n.a.	News article	De Telegraaf
Jongeren wereldwijd de straat op voor het klimaat, ook in Utrecht	24-5-2019	n.a.	News article	NOS
Klimaatmars in Amsterdam: 'Ik staak omdat ik een mens ben'	20-7-2019	Joy Leering	News article	Het Parool
Grote opkomst bij mondiale klimaatstaking Maastricht	20-9-2019	S. Abeling	News article	1Limburg
Scholieren staken voor het klimaat: 'Het gaat helemaal de verkeerde kant op'	20-9-2019	S. Huibers	News article	AD
Derde wereldwijde klimaatstaking: honderdduizenden op de been	20-9-2019	n.a.	News article	NOS
Politie beëindigt blokkade Extinction Rebellion in Amsterdam	21-9-2019	n.a.	News article	NOS
'Neem voor Klimaatstaking een vrije dag'	25-9-2019	n.a.	News article	Trouw
'Meer dan 35.000 mensen bij klimaatmars Den Haag', eindpunt verplaatst door drukte	27-9-2019	A. van Dongen	News article	AD
Klimaatstaking Den Haag overtreft verwachting	27-9-2019	n.a.	News article	De Telegraaf
Amsterdammers krijgen nepbrief met oproep tot demonstreren	27-9-2019	n.a.	News article	NOS
Drukke bij klimaatstaking in Den Haag, eindpunt mars verplaatst	27-9-2019	n.a.	News article	NOS
'Gigantische opkomst' bij klimaatmars door Den Haag	27-9-2019	n.a.	News article	Nu.nl
Duizenden mensen komen af op klimaatmars in Den Haag	27-9-2019	n.a.	News article	Trouw
130 opgepakte klimaatactivisten weer vrij	13-10-2019	n.a.	News article	Het Parool
Nederland in 2019: van de ene naar de andere demonstratie gaan	21-12-2019	R.Khaddari & M. Wiegman	News article	Het Parool