

## Analysing the Influence of Newspaper Columns on Climate Change Policy-Making in the Netherlands: A Framing Analysis

Loudar, Laurens

#### Citation

Loudar, L. (2023). Analysing the Influence of Newspaper Columns on Climate Change Policy-Making in the Netherlands: A Framing Analysis.

Version: Not Applicable (or Unknown)

License: License to inclusion and publication of a Bachelor or Master Thesis,

2023

Downloaded from: <a href="https://hdl.handle.net/1887/3655732">https://hdl.handle.net/1887/3655732</a>

**Note:** To cite this publication please use the final published version (if applicable).

# Analysing the Influence of Newspaper Columns on Climate Change Policy-Making in the Netherlands: A Framing Analysis



Laurens Loudar, s3739929

Master Thesis Leiden University

Public Administration: International and European Governance

Capstone: Knowledge Use in Policy Processes

Supervisor: Dr. L. Dorren

9th of June 2023

17,889 words (Excluding References and Appendices)

# **Table of Contents**

1. INTRODUCTION	5
2. LITERATURE REVIEW	8
2.1 Introduction	8
2.2 METHODOLOGIES AND APPROACHES EMPLOYED IN CLIMATE CHANGE FRAMING RESEARCH	9
2.3 Role of Media in Shaping policy-making on climate change	11
2.4 CLIMATE CHANGE FRAMING IN DUTCH NEWSPAPERS	12
2.5 THEMES AND TRENDS IN CLIMATE CHANGE FRAMING RESEARCH	13
2.5.1 Topic of Interest	13
2.5.2 Methodologies and approaches	14
2.5.3. Period of Analysis	15
2.5.4 Media Sources	16
2.5.5 Frame Dimensions	17
2.5.6 Influence of External Factors	18
2.5.7 Impact on Public Opinion and Policy	19
2.5.8 Consistency with Previous Research	20
2.6 Investigating the Relationship Between Media Frames and Policy-Making	20
2.7 CONCLUSION: INTEGRATING FINDINGS AND ADDRESSING GAPS IN CLIMATE CHANGE FRAMING RESEARCH	21
3. THEORETICAL FRAMEWORK	22
3.1 Introduction	22
3.2.1 Framing	22
3.2.2 Media Framing in the Dutch Context	23
3.3 POLICY-MAKING AND POLITICAL DISCOURSE	24
3.4 AGENDA-SETTING THEORY	25
3.5 THEORETICAL FRAMEWORK: FRAMING THEORY, DISCURSIVE PARADIGM, AND AGENDA-SETTING THEORY	26
3.5.1 The Rationale for Adopting Theories	26
3.5.2 Relevance to the Research Questions and Objectives	27
4. METHODOLOGY	28

4.1 Introduction	28
4.2 DIRECTED CONTENT ANALYSIS	28
4.3 SEQUENCE OF ANALYSIS	28
4.4 ANALYTICAL TOOL	29
4.5 Analysis Approach	29
4.6 Initial Coding Scheme	29
4.7 Sample Selection, Data Collection and Analysis	32
4.7.1 Sample Selection and Population	32
4.7.2 Time Frame and Focus	33
4.7.3 Data Collection – Columns and Opinion Pieces	34
4.7.4 Data Collection – Parliamentary Debates	35
4.8 METHODOLOGICAL RIGOUR AND ROBUSTNESS	37
4.9 LIMITATIONS AND CHALLENGES	38
5. RESULTS	39
5.1 Introduction	39
5.2 CODING AND ANALYSIS	40
5.2.1 Code Frequencies and Normalization Process	41
5.2.2 Illustration of the frequencies across the different frames with the help of tables	42
5.3 RESULTS FROM THE ANALYSIS OF COLUMNS AND OPINION PIECES	45
5.3.1 Presentation of the most frequent frames	45
5.3.2 Detailed Instances of these Frames	46
5.4 RESULTS FROM THE PARLIAMENTARY DEBATES	47
5.4.1 Presentation of the most frequent frames	47
5.4.2 Detailed Instances of these Frames	48
5.5 COMPARATIVE ANALYSIS OF FRAMES	49
5.5.1 The Systemic Change Frame	49
5.5.2 The Industry Responsibility Frame	50
5.5.3 The Morality Frame and the Politics Frame: Political Inaction	50

	5.5.4 The Politics Frame: Political Strategies50
	5.6 CONCLUSION
6. 1	DISCUSSION
	6.1 Introduction
	6.2 DISCUSSION ON THE CONTEXT OF FRAMES IN COLUMNS AND OPINION PIECES
	6.2.1 The Systemic Change Frame
	6.2.2 The Morality Frame53
	6.2.3 The Politics Frame: Political Inaction
	6.3 DISCUSSION ON THE CONTEXT OF FRAMES IN PARLIAMENTARY DEBATES
	6.3.1 The Systemic Change Frame55
	6.3.2 The Industry Responsibility Frame55
	6.3.3 The Politics Frame: Political Strategies56
	6.4 COMPARATIVE ANALYSIS OF FRAME
	6.5 Implications of Findings
	6.6 Limitations and Future Research
	6.7 CONCLUSION:
7.	CONCLUSION62
AN	NEX 1: NEWSPAPER COLUMN LIST (NOVEMBER 2022)69
AN	NEX 2: NEWSPAPER COLUMN LIST (NOVEMBER 2021)71
AN	NEX 3: NEWSPAPER COLUMN LIST (DECEMBER 2019)73
AN	NEX 4: DEBATE LIST74
AN	NEX 5: INITIAL CODEBOOK BASED ON CHETTY ET AL. (2015), NISBET (2010), AND BLUE (2015)75
AN	NEX 6: HYBRID CODEBOOK DERIVED FROM THE WORKS OF CHETTY ET AL. (2015), NISBET (2010), BLUE
(20	15), DUTCH HOUSE OF REPRESENTATIVE DEBATES, AND DUTCH NEWSPAPER COLUMNS80

#### 1. Introduction

The Intergovernmental Panel on Climate Change's (IPCC) latest report draws an alarming escalation of global warming impacts. The manifestation of rapid climate change is currently evident through the increase of extreme meteorological phenomena. Another sign is the rapid disintegration of vital ecosystems. To restrict the global temperature surge to 1.5°C above the pre-industrial era, comprehensive and immediate measures are indispensable. The United Nations Secretary-General, António Guterres, fervently advocates for the instantaneous launch of climate initiatives spanning every industry and nation. Overall the latest report underscores the urgency for governments to take action in the next decade since the following IPCC assessment is not expected until 2030 (Harvey, 2023). These actions involve cutting emissions and supporting renewable energy and low-carbon technologies. Additionally, developed countries must attain net-zero emissions by 2040.

The IPCC report highlights implications for all nations, including the Netherlands. The Netherlands is situated for about a third of its mass below sea level and enjoys a long coastline. The potential susceptibility of the country to flooding becomes increasingly conspicuous. Despite the looming threat, the Dutch have historically leveraged technology to defend against water, including sea-land reclamation and dam construction. Internationally acknowledged for its proficiency in water management, it is incumbent upon the Netherlands to devise an effective strategy for combating the potential sea-level rise induced by global warming. The rising sea level will pose significant challenges to the country in the near future (Louanna, 2019).

Navigating these challenges and driving necessary action will require significant public awareness and engagement. The media's function proves pivotal in this context. The portrayal of climate change, its ramifications, and possible countermeasures in the media can significantly mould public opinion and sway policy deliberations. Media dictates the public's climate change comprehension and perception, thereby affecting democratic procedures and determining the accountability for addressing these concerns (Medrano & Gray, 2010; Anderson, 1997; Entman, 1993; Iyengar, 1994; Pellizzoni, 2004). The media plays a significant part in showcasing and discussing climate change consequences, shaping influential figures' views on risk evaluation and response, and directing dialogue platforms for policy formulation (Ford & King, 2015). Through framing, journalists and news creators affect the public and

policy-makers' understanding and engagement, ultimately shaping public perceptions and opinions on climate change (Ford & King, 2015; McCombs, 2004; Scheufele, 1999).

Surveying the existing body of research on climate change framing reveals several significant gaps. While the Dutch context has been considered in past studies, it has only been included as part of a comparative study, not as a standalone focus (Shehata & Hopmann, 2012). Furthermore, much of the available literature is now somewhat dated (Antilla, 2005; Boykoff & Boykoff, 2007; Good, 2008; Billet, 2010; Olausson, 2009; Dotson et al., 2012; Dirikx & Gelders, 2010; Han et al., 2017; Gkiouzepas & Botetzagias, 2017). While previous studies have recognised the potential implications of media framing on public opinion and policy development, they have yet to explicitly examine the connection between media framing and climate change policy-making. This thesis addresses these gaps by providing a detailed investigation into climate change framing in the Dutch context, connecting media narratives with their potential influence on national climate change policy-making."

The cause for the study can be found in need to understand the role that frames and discourses embedded in Dutch newspaper columns play in shaping national climate policy. Existing research has provided valuable insights into climate change discourses internationally in newspapers. Nevertheless, this study strives to fill certain voids in the extant literature. It contributes to the overarching address on media's role in shaping climate policy, providing an exhaustive analysis of the narratives and their impact on policy-making. The resulting insights are significant for policy-makers, media professionals, and other climate change stakeholders in the Netherlands.

This research hinges on the intricate nexus between media discourse, public perception, and policy formulation processes. Given the substantial role of media in influencing public sentiment and policy resolutions, apprehending the subtleties of this relationship, particularly within the climate change framework, is imperative. This study, therefore, probes the questions: How are discourses and frames constructed in the media coverage of climate change? And how do these discourses and frames permeate policy-making in the Netherlands?

Such investigation will add more than another layer of understanding to the climate change discourse analysis. Still, it will help discern the potential influence of media frames on the formation of climate policies. This research, therefore, is centred around two main research questions:

RQ1: What discourses or frames are embedded in Dutch newspaper columns on climate change?

RQ2: How do these discourses or frames influence policy-making on climate change in the Netherlands?

This research doesn't merely reaffirm the significance of climate policy but seeks to discern how media narratives and framing surrounding climate change can steer, influence, and potentially dictate the course of such policies. By probing the association between media representation of climate change and policy-making in the Netherlands, the study endeavours to unravel the construction of discourse and its influence on policy resolutions, thereby offering fresh insights into the intricate dynamics of framing within climate change policy-making.

Employing content analysis, this thesis delves into the intricate relationship between media portrayal of climate change and its influence on policy-making in the Netherlands. Initially, the study unravels the prevailing discourses and frames on climate change present in Dutch newspapers. These insights shed light on how media representation might shape public discourse and attitudes. Further, by analysing these frames within debates in the House of Representatives, the research probes into the possible influence of media narratives on policy-making, acknowledging that establishing a direct causal link may pose certain complexities.

The scientific relevance of this investigation stems from its substantial addition to the corpus of literature on climate change discourses and policy-making. It addresses identifiable gaps in prior research, specifically in understanding the dynamics of climate change framing in the Dutch context and its implications on policy-making. This meticulous and contemporaneous analysis of climate discourses augments our comprehension of their prospective impact on the policy domain.

Furthermore, the study delves into the intricate dynamics between media depiction, public understanding, and the policy-making procedure within the climate change context. By scrutinizing the mutual relationship between media narratives and policy decisions, the research offers a nuanced viewpoint on how discourse could mould the course of policy-making mechanisms.

In terms of social relevance, this study could provide valuable insights into the role of media in shaping climate policy, which could be vital for policy-makers, media professionals, and other stakeholders. Based on the findings highlighting the dominance of frames like the

Systemic Change Frame, Industry Responsibility Frame, and Politics Frames, the study elucidates how these narratives could either facilitate or hinder the progression and implementation of effective climate change policies. Such understanding can equip stakeholders with the knowledge to devise impactful communication strategies, promote public engagement in policy discussions, and influence more effective policy-making.

In conclusion, this study aims to analyze the discourses or frames prevalent in Dutch newspaper columns on climate change and their potential influence on national policy-making. It evaluates their presence in debates within the House of Representatives to estimate the possible repercussions of media narratives on policy-making outcomes. Through a detailed content analysis approach, the research strives to enhance the understanding of climate change framing in the Dutch milieu and augment the existing literature on the synergy between media, public perception, and climate change policy. The study, thus, serves both academic and social purposes, enriching scholarly understanding of media-climate policy dynamics and offering actionable insights to policy-makers, media professionals, and other stakeholders participating in the Netherlands' climate change discourse.

## 2. Literature review

#### 2.1 Introduction

This literature review aims to provide a comprehensive overview of existing research on media framing of climate change, focusing on newspaper portrayals. The current study investigates the Dutch context; however, the review will also consider relevant findings from comparative studies and those conducted in different countries, as only one study has considered the Dutch context (Dirikx & Gelders, 2010). By analysing key themes, patterns, and gaps in the literature, this review will contextualise the current study and address the following research questions:

RQ1: What discourses or frames are embedded in Dutch newspaper columns on climate change?

RQ2: How do these discourses or frames influence policy-making on climate change in the Netherlands?

By cultivating an explicit link between the literature review and the research queries, this critique paves the way for subsequent discussions on theoretical constructs and methodologies, thereby reinforcing the structural integrity of this thesis.

Climate change has morphed into a vital global conundrum, significantly affecting human societies and natural ecosystems. The media significantly shapes public perception and opinion on this complex issue and impacts how climate change policies are made. This connection between framing and policy-making is the foundation for the relationship between research questions 1 and 2. A growing body of research has examined how climate change is portrayed in various media outlets, including newspapers, television, and digital platforms. This literature review will begin by outlining the concept of framing. Afterwards, the role of the media in shaping policy-making on climate change is discussed. Subsequently, the review will delve into important aspects of previous studies, such as topics of interest, approaches to framing, periods of analysis, media sources, frame dimensions, comparative analyses, influences of external factors, impacts on public opinion and policy, methodological rigour, consistency with other research, and recommendations for future research. By examining these dimensions, this review aims to provide a comprehensive understanding of the existing scholarship on climate change media coverage, focusing on the Dutch context while considering relevant findings from other countries and ultimately identifying areas for further investigation.

## 2.2 Methodologies and approaches employed in climate change framing research

The forthcoming sections delve deeper into framing, encompassing a thorough examination of multiple methodologies utilised in framing research. This span both inductive and deductive methods and qualitative and quantitative paradigms.

The concept of framing is known in various disciplines. These include the social sciences but also psychology, sociology and behavioural economics. Nonetheless, interpretations of the term differ, giving rise to an array of definitions (Cacciatore et al., 2016, p. 3). Despite the vast array of framing definitions, a common thread weaves them together: highlighting particular aspects of communicated reality to evoke a distinct interpretation (Entman, 1993, p. 52). This understanding of framing provides a foundational concept for the present research, as it implies that information can be manipulated to become more noticeable

and memorable to an audience. The impact of this process on audience perception is especially notable in the context of news framing.

According to Schuck and Feinholdt (2015, p. 2), news framing involves presenting a single topic from various angles, accentuating certain aspects while downplaying or ignoring others. This approach amplifies the potential of media to shape public discourse by consistently interpreting issues in a specific way, a phenomenon that this study aims to investigate.

The framing process is further dissected by De Vreese (2005), who introduces the concepts of frame-building and frame-setting. This research not only considers how news frames emerge, but also how they interact with audience predispositions. These concepts provide a basis for exploring the construction and influence of news frames, both of which are central to the current study.

Although this research focuses on issue-specific frames, it acknowledges the caveat de Vreese (2005) raised about the high specificity of such frames. This level of specificity, while providing high relevance to the subject being investigated, could hinder the ability to generalize and compare findings and limit their application in theory-building studies.

In light of the objective of this study, which is to identify and describe prominent frames rather than test effects, the problem sensitivity associated with issue-specific frames is considered a minor concern. Emphasising an issue's unique aspects can lead to richer insights, even if it limits the scope for generalisation.

Entman (1993) offers a four-element system for frame-building, which guides the framing analysis in this study. This system involves defining problems, diagnosing causes, making moral judgments, and suggesting remedies - all within the context of shared cultural values. While not all frames may have all four functionalities, this framework provides a structured approach to frame analysis.

Identifying news frames often employs either an inductive or quantitative coding approach based on content-analytic indicators (A. Schuck & Feinholdt, 2015, p. 3). This study will utilise a particular type of qualitative content analysis, as outlined in the methodology section. The reason for this choice is that a quantitative analysis based on predetermined generic frames may not provide a satisfactory answer to the research question at hand.

## 2.3 Role of Media in Shaping Policy-Making On Climate Change

The intricate nexus between media representation, public sentiment, and policy formulation proves especially intriguing within the climate change framework. This section scrutinises pivotal studies that illuminate this dynamic, specifically focusing on how media discourses and framing can sway policy resolutions.

Media plays a vital role in political information. The media is a crucial connection between policy-makers, scientific knowledge, and the broader public. This fact is demonstrated in studies like the one conducted by Bell (1994), which highlight how mass media's portrayal of climate issues significantly influences climate science, policy, and public opinion.

Medrano and Gray (2010, p. 196) elaborate on the media's significant societal function, particularly in disseminating contextual perspectives to the masses. They emphasise that media outlets, like newspapers, construct and propagate specific discourses or frames that can shape societal understanding of climate change and potential solutions.

The influence of media extends to environmental matters as well. As Anderson (1997) and Entman (1993) noted, media framing significantly impacts democratic processes by shaping perceptions of environmental issues. Furthermore, media plays a crucial role in determining who is accountable for addressing societal challenges, a point underscored by Iyengar (1994). Pellizzoni (2004) emphasises the importance of assigning responsibility, particularly given the prominence and scientific ambiguity associated with environmental concerns.

Adding to this, Ford & King (2015) posit that media is instrumental in shaping climate change discourse. It influences risk evaluations and responses of critical figures, establishes dialogue platforms for policy formulation, and steers the direction of these discussions.

The influence of media extends beyond the sheer content they deliver, encompassing the manner of its presentation. The notion of framing, as scrutinised by Ford & King (2015), represents a critical component of how media can mould comprehension and involvement regarding particular matters. By meticulously selecting language, tone, and focal points, structuring evidence and arguments, and manoeuvring around ambiguity, journalists can notably sway perceptions.

Despite the substantial debate surrounding the characterisation of climate change coverage in the media, there is a broad consensus that media assumes a fundamental role in sculpting public awareness, perspectives, and attitudes towards global warming (McCombs, 2004; Scheufele, 1999).

## 2.4 Climate Change Framing in Dutch Newspapers

Studies examining climate change framing in Dutch newspapers are noticeably sparse. Dirikx and Gelders' research in 2010 is the sole representative, which surveyed the climate change discourse in Dutch and French newspapers during the United Nations Conferences of the Parties (CoPs) spanning 2001 to 2007.

While the Netherlands has been included in comparative studies such as this one, it's evident that there's a deficit of studies examining Dutch climate change framing in isolation. While the broader comparisons offer enlightening glimpses into framing variations and external influences, a focused exploration of the Dutch context could provide more profound, more context-specific insights. Such a study would better elucidate the unique discourse and perceptions surrounding climate change within the Netherlands and how it might shape policy-making.

Dirikx and Gelders' research deployed a deductive approach to framing with a quantitative methodology. In their analysis of 257 newspaper articles, they discovered similar framing patterns between Dutch and French media. The themes that emerged predominantly discussed the potential gains or losses of specific actions and underscored the urgency of action and the government's role in tackling climate change. The framing dimensions of consequences, responsibility, conflict, human interest, and morality were drawn from Semetko and Valkenburg's (2000) generic frames.

In light of this dearth of Dutch-focused research, the subsequent section of this literature review will pivot to discussing themes and trends within climate change framing research that considers a broader set of predominantly Western countries.

## 2.5 Themes and Trends in Climate Change Framing Research

This section provides an overview of the main themes and trends in framing climate change within media outlets. The examination of these themes provides a foundation for understanding the strategies and perspectives reflected in media coverage and their potential implications on public perception and policymaking. This analysis will cover various topics, each represented by a subheading, and will evaluate significant findings in each area.

#### 2.5.1 Topic of Interest

The literature on climate change media coverage generally encompasses various focal points, including the portrayal of global climate change in newspapers, the reasons behind specific representations, and the extent to which political debates are reflected in news coverage. The selected articles demonstrate a combination of these interests, illustrating the complex nature of climate change discourse in the media.

A primary focus of many reviewed articles is the portrayal of global climate change in newspapers. For instance, Chetty et al. (2015) investigate climate change science framing in New Zealand's quality newspapers, and Han et al. (2017) examine the framing of global climate change in Chinese newspapers. By exploring specific frames in the selected newspapers, these studies emphasise the significance of media coverage in shaping public perception of climate change.

Another central theme in these articles is exploring why particular representations of climate change exist. Dotson et al. (2012) analyse the portrayal of global climate change in Chilean newspapers, delving into the reasons for certain representations and the reflection of political debates in news coverage. Similarly, Gkiouzepas and Botetzagias (2017) investigate climate change coverage in Greek newspapers to comprehend the rationale behind specific portrayals. Han et al. (2017) also discuss the reasons for particular representations, emphasising the intricate roles played by the Chinese Communist Party and market demands in shaping news frames. These studies highlight factors influencing climate change framing in the media, such as political and ideological affiliations, scientific consensus, and journalistic practices.

Some articles also concentrate on whether news coverage represents differences in political debates. Shehata and Hopmann (2012) explore the impact of domestic political elites

on climate change coverage in Swedish and American news outlets, determining if differences in national political debates are reflected in the coverage. Dotson et al. (2012) also investigate the representation of political debates in news coverage, identifying significant differences in climate change framing between liberal and conservative Chilean newspapers. Furthermore, Gkiouzepas and Botetzagias (2017) demonstrate that Greek media's reporting on contested policy questions corresponds with their political and ideological affiliations.

#### 2.5.2 Methodologies and Approaches

A variety of methodologies and approaches are employed in the field of climate change framing research, including both deductive and inductive framing approaches. Deductive framing identifies specific pre-determined frames and analyses their presence or absence in media coverage (A. R. Schuck & De Vreese, 2006, p. 13; Semetko & Valkenburg, 2000, p. 94). This method is beneficial for handling large data samples and identifying framing differences across various media outlets.

On the other hand, inductive framing analyses the data to derive potential frames (Semetko & Valkenburg, 2000, p. 94). This approach is exploratory, starting with loosely defined assumptions and offering a more nuanced, but time-consuming analysis of media frames.

Furthermore, these framing studies are often supplemented with quantitative and qualitative methodologies. Quantitative studies offer insights into the frequency, distribution, and relationships of different frames, using numerical data and statistical methods. Conversely, qualitative studies focus on the language, themes, and narratives present in climate change frames, using discourse analysis, thematic analysis, and narrative analysis.

A common thread across these various methodologies is their aim to understand the influence of framing on public perception of climate change. For instance, studies often investigate how frames related to 'scientific certainty' or 'uncertainty' shape the understanding of scientific consensus on climate change (Shehata & Hopmann, 2012). Some research highlights the political aspects of climate change framing by exploring frames around conflict, human interest, and economic consequences (Dotson et al., 2012; Chetty et al., 2015). Other studies differentiate between 'hard' adaptations, such as techno-engineering responses, and

'soft' adaptations, like policy interventions, to understand how these aspects are portrayed in the media (Ford & King, 2015).

Overall, a range of frames are employed across these studies, and some even combine deductive and inductive methods to provide comprehensive insights. The selected studies offer evidence that various factors, including political and scientific elements, play a significant role in climate change framing and can shape public perception and understanding. The methodological approach used in each study significantly impacts the findings and implications of the research, illustrating the importance of the chosen framing method in climate change media analysis.

#### 2.5.3. Period of Analysis

Studying climate change media coverage reveals interesting insights into the temporal influence on the framing and interpretation of climate change issues. The choice of period for analysis is a crucial aspect of these studies, influenced by several considerations, mainly revolving around key events, policy changes, and shifts in the scientific consensus. This deliberate selection often has a significant impact on the findings of each study.

When researchers choose a specific time frame, they often correlate it with global events or policy shifts that might have prompted changes in the media's framing of climate change. This is evidenced by studies like Boykoff & Boykoff's (2007) and Shehata & Hopmann's (2012), where periods coinciding with international climate conferences and policy debates were chosen. These significant events provided a background against which changes in public opinion, and policy debates could be examined, contributing to the depth of the findings.

Similarly, Ford & King's (2015) study illustrated how extreme weather events like Hurricane Sandy and reports from the IPCC significantly influenced the media's portrayal of climate change adaptation, thus underscoring the reason behind choosing their specific period.

These choices of periods are not just logistical but also have substantial implications for the findings. The period's alignment with pivotal events or policy changes often leads to uncovering varying interpretations and narratives of climate change in the media, impacting the studies' generalizability.

In conclusion, the choice of a time period for analysis in climate change framing studies is not merely a research design consideration. It holds substantial relevance for the reader as it often aligns with significant events, revealing the dynamism in media framing of climate change. Understanding this can offer crucial insights into the temporal influence on public discourse and policy debates on climate change.

#### 2.5.4 Media Sources

Most studies on climate change framing primarily focus on newspaper coverage, while some include television news and digital platforms. These media sources represent a range of political orientations and target audiences, including liberal and conservative newspapers, national and regional publications, and mainstream and niche outlets. This multi-faceted approach aids scholars in understanding the framing of climate change in various contexts as well as assessing its effect on public sentiment and policy formulation. An example is the study by Boykoff and Boykoff (2007). These authors analyzed the coverage of climate change in leading American newspapers. Their goal was to examine how climate change portrayal varied among these politically diverse publications (New York Times, Washington Post; The Wall Street Journal) and understand the implications of these differences on public comprehension and climate policy.

Similarly, Shehata and Hopmann (2012) analysed Swedish and American newspaper coverage, including national and regional publications. Their research scrutinized newspapers with diverse political inclinations, such as the liberal-leaning Dagens Nyheter and conservative-leaning Svenska Dagbladet in Sweden, as well as The New York Times and The Washington Times in the US. By contrasting the climate change portrayal across these heterogeneous media sources, their objective was to probe the sway of political ideology on climate change framing and its possible implications for general cognition and policy determination.

These studies explore media sources with diverse political orientations and target different audience segments. This approach enables researchers to examine how climate change framing varies across media outlets and investigate the potential effects of these portrayals on public opinion, attitudes, and behaviours.

#### 2.5.5 Frame Dimensions

Various dimensions of climate change framing have been explored in the literature, each with its distinct implications. These frames have significant implications for shaping public perception and influencing policy decisions.

Issue-specific frames, for instance, offer unique perspectives on climate change issues. Key frames such as scientific uncertainty, economic consequences, and benefits have been explored extensively (Antilla, 2005; Good, 2008). A prevalent example is the scientific uncertainty frame, which often presents climate change as an issue requiring further research before action, a perspective seen in media coverage in the US, UK, France (Billet, 2010), and Sweden (Olausson, 2009). This frame has been used to delegitimise climate science or downplay the severity of climate change.

Another significant dimension is adaptation-related frames. These focus on strategies to mitigate climate change impacts, including 'hard' adaptations like technological solutions and 'soft' adaptations such as policy interventions (Ford & King, 2015). The discussion extends to the comparison of reactive and anticipatory adaptations, with Belgian media, for example, being found to focus more on reactive adaptations (Dirikx & Gelders, 2010). The emphasis is on the need to highlight more anticipatory measures in media coverage to prepare for future climate change impacts.

Political factors too significantly influence climate change framing. A case in point is how domestic political elites and scientific consensus affect media coverage (Shehata & Hopmann, 2012). The study suggests that political actors shape news coverage, with differences in national political debate reflected in the framing of climate change issues.

Beyond these specific frames, broader themes such as politics, social progress, economic competitiveness, and more are used to contextualise climate change issues. For instance, Greek newspapers predominantly address the policy dimensions of climate change, alongside science, technology, and economic topics (Gkiouzepas & Botetzagias, 2017).

In conclusion, the literature provides ample evidence of the different dimensions of climate change framing. The various sizes of climate change framing, including issue-specific frames, adaptation-related frames, and broader themes, such as politics, social progress, and economic competitiveness, play a significant role in shaping public perception and influencing policy decisions. Considering these frames when analysing climate change coverage in the

media is essential to understand better how it shapes public opinion and affects policy decisions.

#### 2.5.6 Influence of External Factors

As part of understanding the framing of climate change in Dutch newspapers and its potential impact on policy development, it's vital to examine the factors external to the media that can influence this framing. Such factors can include political, economic, and social forces, or more media-related aspects like the role of global news agencies and the professionalisation level of journalists.

Literature has documented these influences. For example, Dirikx and Gelders (2010) discuss how Belgian journalists' reliance on global news agencies for information can sway the framing of climate change issues. Similarly, Olausson (2009) identifies how external agents—such as politicians or businesses—can use media outlets to manipulate the framing of climate change in Sweden, often to downplay its seriousness or delegitimise climate science.

In another instance, Shehata and Hopmann (2012) demonstrate that political actors and the level of scientific consensus significantly influence climate change framing in Swedish and US newspapers. These studies underline that differences in national political debate are reflected in the framing of climate change issues.

The findings from these studies suggest a potential for similar influences in the Dutch context. For instance, if Dutch newspapers heavily rely on global news agencies for climate change coverage, it could sway the framing of the issue in the country. Similarly, external agents' manipulation of journalists' work might shape public perceptions and influence policy decisions.

Thus, understanding the impact of external factors on climate change framing in other contexts helps to situate this study within the broader research landscape. It provides valuable insights into potential influences on Dutch newspaper coverage of climate change that could impact policy development.

#### 2.5.7 Impact on Public Opinion and Policy

Some of the reviewed studies assess the impact of framing on public opinion or climate change policy. They examine the potential implications of observed framing patterns for general understanding and attitude formation but only hint at the influence on policy development, considering factors such as issue salience, perceived urgency, and public support for mitigation or adaptation measures.

The articles mention the potential implications of media framing on public opinion and policy development. However, they need to explicitly connect media framing and policy-making on climate change. Nevertheless, they propose that comprehending media framing is fundamental to devising improved communication strategies and engaging the public on climate change issues, which may influence policy decisions.

Although some of the studies cited do not overtly address the relationship between media coverage and policy-making concerning climate change, they recognize the potential impact of framing on public comprehension, which can subsequently mould policy dialogue. For instance, the studies by Shehata and Hopmann (2012) and Chetty et al. (2015) explore how media framing moulds public perception and stances towards climate change, which can bear on policy-making. The investigation by Han et al. (2017) also scrutinizes the possible impact of framing on policy dialogue by assessing how political debates and interests shape the news coverage of climate change in China. These studies indicate that media coverage can form public discourse, subsequently influencing policy-making. However, further research is required to thoroughly understand the connection between media coverage and policy-making on climate change.

Comprehending how frames employed by media and politicians mold public opinion and policy-making on climate change is essential for devising efficient strategies to tackle this issue. Examining whether frames on climate change in the media are reflected in the frames used by politicians in the House of Representative debates is interesting. It could provide valuable insights into how these frames are shaping policy-making. However, it is essential to note that other factors, such as economic interests, public opinion, and international agreements, can influence climate change policy-making.

#### 2.5.8 Consistency with Previous Research

The findings of the reviewed studies, such as Boykoff & Boykoff (2007), Ford & King (2015), and Shehata & Hopmann (2012), align with prior research on climate change framing. They underline the prevalence of frames like scientific uncertainty, economic consequences, and political conflict, as well as the influence of external factors like political parallelism and news agency reliance on framing patterns (Antilla, 2005; Billet, 2010; Olausson, 2009).

However, there's a recognition that climate change coverage may bear unique aspects specific to certain countries, regions, or media systems (Dirikx & Gelders, 2010; Gkiouzepas & Botetzagias, 2017). Such understanding brings forth the importance of further research to unpack the nuances and variations of climate change framing across different contexts. This aspect of the discourse further justifies the relevance of this study in examining the Dutch context, contributing to a comprehensive understanding of climate change framing in diverse media landscapes.

## 2.6 Investigating the Relationship Between Media Frames and Policy-Making

Previous segments of the literature review delved into the diverse frames utilized in media narratives on climate change (RQ1), and the potential influence of these frames on public sentiment and policy formulation (RQ2). To grasp more holistically the link between these two research inquiries, it becomes paramount to scrutinise the relationship between the frames identified in Dutch newspaper articles and their sway over climate change policy-making within the Netherlands.

By analysing the prevalent frames and discourses in Dutch newspapers and scrutinising their presence in House of Representative debates, this study seeks to illuminate the potential impact of media coverage on policy-making outcomes. Although establishing a direct causal relationship may prove challenging, comprehending the interplay between media frames and policy-making can offer valuable insights for devising effective communication strategies, engaging the public on climate change issues, and shaping policy responses to address this pressing global challenge.

# 2.7 Conclusion: Integrating Findings and Addressing Gaps in Climate Change Framing Research

This literature review outlines that the framing of climate change is highly contextual and can significantly influence public perception and policy-making. From the existing body of literature, it is clear that framing mechanisms can vary greatly depending on geographical location, cultural nuances, and political climate. Hence, investigating these mechanisms in the Dutch context will contribute significantly to a more comprehensive understanding of climate change framing globally.

Secondly, the reviewed studies suggest that media plays an instrumental role in shaping public opinion on climate change, further influencing policy formulation. However, there is a lack of detailed exploration of this aspect in the Netherlands, specifically within Dutch newspapers. Consequently, probing the connection between media portrayal and climate change policy-making in the Netherlands is anticipated to bridge this research chasm, offering important insights.

Finally, the literature underscores that external determinants such as economic conditions, political incidents, and scientific innovations can mold the framing of climate change. Incorporating the analysis of these elements into the forthcoming investigation on Dutch media will yield a more intricate comprehension of the factors influencing climate change dialogue in the country focusing on these aspects derived from the literature, the upcoming study aims to contribute a more comprehensive perspective on how climate change is framed in Dutch newspapers, and how these frames potentially influence policy-making in the Netherlands. It will also examine the factors shaping this discourse, bridging a gap in the existing literature. Therefore, the study's findings will be significant for improving communication methods and policy-making strategies related to climate change, enhancing understanding of the intricate relationship among media, public opinion, and climate policy. Transitioning into the theoretical framework, a deeper exploration of framing, discourse, and agenda-setting theories will take place, providing the conceptual underpinnings to explore these aspects of climate change communication and policy-making in the Netherlands.

#### 3. Theoretical framework

#### 3.1 Introduction

This study integrates the concepts of framing theory, the discursive approach, and agendasetting theory to examine how the Dutch media's portrayal of climate change affects policymaking. By merging these theories, the study can achieve a more complete understanding of the intricate connections between media depictions, societal discussions, and the development of policies.

This chapter will discuss the theories and concepts relevant to the research question and the rationale for choosing them. The theoretical framework comprises multiple concepts and theories from framing, policy-making, and political discourse. The chapter will highlight the importance of these theories for understanding the dominant discourses and frames on climate change in Dutch newspapers and their presence in House of Representative debates, ultimately providing insights into the potential impact of media coverage on policy-making outcomes in the Netherlands.

#### 3.2.1 Framing

This thesis has already examined framing in depth in the literature review, so only a brief summary is provided here. Entman (1993) defines framing as selecting and emphasising specific aspects of a communicated reality. Schuck and Feinholdt (2015) define news framing as presenting a single topic in various ways, emphasising certain aspects while neglecting others. De Vreese (2005) breaks framing into frame-building (how frames emerge) and frame-setting (interaction between media frames and audience predispositions). In conclusion, as defined by prominent scholars, framing involves selecting and emphasising certain aspects of a communicated reality. This study will employ the concept of framing, specifically issue-specific frames, in understanding how climate change is represented in Dutch newspapers.

#### 3.2.2 Media Framing in the Dutch Context

The Dutch context of this study may give insights into specific frames that reflect the country's history, cultural values, and political landscape. The study can contribute to a deeper understanding of climate change discourse by identifying and analysing possibly unique or innovative frames. The literature review noted that many studies in this field tend to depend on generic frames.

This research focuses on news frames, specifically issue-specific frames, which provide high specificity and relevance to the investigated subject. However, their problem sensitivity makes it difficult to generalise or use as data for theory-building studies. The research aims to describe content rather than test effects or generalise, making issue-specific frames suitable. Entman's (1993) frame-building system, consisting of four aspects, guides the framing analysis. This study uses a qualitative content analysis approach to identify news frames because it allows for a more in-depth exploration of the discourses and frames embedded in the text, uncovering nuances and subtleties that a quantitative approach based on pre-determined generic frames may overlook, thus providing a more comprehensive understanding of the research questions.

The heightened sensitivity to the problem makes generalisation, comparison, and utilisation in theory-building research based on issue-focused frames challenging (De Vreese, 2005, p. 55). However, this concern is not a significant hindrance to this study, as the goal is to identify and characterise the prevalent frames without statistically examining their effects. This aspect can be considered the strength of adopting an issue-specific framing approach, as it allows for the description of unique aspects instead of attempting to generalise. Employing broad frameworks would yield a shallow response to the research question. To achieve socially and scientifically important insights regarding the framing of climate change, it is essential, to begin with issue-focused frames that pertain to the concept of meaning.

In sum, media framing in the Dutch context provides a unique opportunity to explore possibly innovative or unique frames that reflect the country's history, cultural values, and political climate. An issue-specific framing approach is adopted to capture these unique aspects and provide a detailed description of climate change discourse in the Netherlands.

### 3.3 Policy-making and Political Discourse

As mentioned in the introduction and literature review, the media plays a crucial role in shaping public perception and understanding of climate change, impacting democratic processes and accountability (Medrano & Gray, 2010; Anderson, 1997; Entman, 1993; Iyengar, 1994; Pellizzoni, 2004). Framing influences discussions on climate change consequences, risk evaluation, response, and policy formulation (Ford & King, 2015). Through framing, journalists and news creators affect public and policy-makers' engagement, ultimately shaping opinions on climate change (Ford & King, 2015; McCombs, 2004; Scheufele, 1999). A theoretical underpinning of policy-making processes and political discourse is examined to understand the potential impact of media framing on policy-making. This section will explore the relevance of the discursive paradigm to the research question and the connection between media coverage and policy-making processes.

The discursive paradigm has arisen as a notable alternative to rational choice theory in the analysis of policy and policy processes, inspired by the linguistic turn observed in philosophy and social sciences. This paradigm challenges the notion of "objective knowledge for and on policy" (Durnova et al., 2016, p. 35) as a fallacy. Central to this approach is the importance of discourse in comprehending how participants interpret and transform the world through language. The discursive paradigm views policy as an intrinsically political process driven by beliefs, meanings, and arguments. Within this paradigm, three distinct frameworks can be identified.

Firstly, the initial framework examines argumentative tactics as a linguistic play, where participants create meaning by connecting various concepts that aren't inherently or logically connected. They share these new connections through arguments, ultimately constructing a new reality. Secondly, the second framework perceives argumentative tactics as interactions fostering consensus and discord among participants. The policy proposal's progression occurs within a complex network of various organisations involved in policy-making. Lastly, the third framework treats argumentative strategies as power exercises, where individuals not only present arguments to persuade and convince others but also negotiate, enforce their viewpoints, and achieve success through these tactics (Durnova et al., 2016).

The shift towards argumentation in policy analysis refutes the notion that policy analysis can be impartial, stressing the importance of practical argumentation, policy

evaluation, rhetorical scrutiny, frame examination, and narrative plots. This perspective subjects policy debates to a higher-order ethical critique and evaluates policy-making according to its own standards (Durnova et al., 2016).

The discursive method for addressing social issues is grounded in the fundamental principle that policy solutions are constructions to which participants and groups assign significance, values, outcomes, and problem-solving capabilities. Social practices reflect and contribute to forming and transforming ideas, representations, types of knowledge, values, beliefs, and standards (Durnova et al., 2016).

Additionally, recent research highlights the significance of emotions in policy processes, moving beyond the ethical assessment of emotions to explain why specific emotions emerge in certain policy contexts. As values gain collective validation through the policy process, emotions help explain why some values take precedence and expose social connections among actors (Durnova et al., 2016).

To sum up, discursive approaches to policy-making have questioned the positivist perspective on politics and given rise to two new research areas: the argumentative shift and the emphasis on emotions. These methods underscore the possible influence of media framing on policy-making, accentuating the role of discourse, argumentation, frames, and emotions in shaping policy decisions and processes (Durnova et al., 2016).

## 3.4 Agenda-setting Theory

Agenda-setting theory, initially introduced by Maxwell McCombs and Donald L. Shaw, explores the power of media in determining which issues and events capture public attention and significance (McCombs & Shaw, 1972). The theory argues that media influences the public's perception of an issue's importance by focusing on specific events, topics, and individuals, directing public attention and shaping public discourse. This theory is a helpful framework for this thesis, which investigates the framing of climate change in Dutch newspapers and its connection to policy.

Understanding the cognitive impact of media exposure necessitates an analysis of the frames employed by Dutch newspapers when presenting climate change issues. These frames can shape public opinion and policy priorities by influencing the public's comprehension,

awareness, and perception of climate change. By examining these frames, this research aims to determine their contribution to agenda-setting effects and investigate how they might have formed or affected public opinion, public discourse, and policy actions related to climate change.

In summary, agenda-setting theory provides a valuable theoretical foundation for understanding the influential role of media in shaping public awareness and policy priorities concerning climate change. Through the analysis of climate change framing in Dutch newspapers, this research aspires to enhance our understanding of the link between media representations and policy outcomes, with potential implications for climate change communication and policy interventions.

# 3.5 Theoretical Framework: Framing Theory, Discursive Paradigm, and Agenda-Setting Theory

Having outlined the importance of framing, the Dutch context, policy-making and political discourse, and agenda-setting theory in separate sections, this part of the chapter converges these theories into a cohesive theoretical framework. The subsequent paragraphs will elaborate on the rationale for adopting these theories and their relevance to the research questions and objectives. This integrated framework provides the theoretical lens through which this study views and interprets the relationship between climate change framing in Dutch newspapers, public discourse, and policy-making

#### 3.5.1 The Rationale for Adopting Theories

Framing Theory, Discursive Paradigm, and Agenda-Setting Theory form the theoretical backbone of this research, providing the conceptual lenses through which the results will be interpreted. Each theory brings a unique perspective on media representation and its influence on policy-making processes and public discourse, particularly in the context of climate change.

Framing Theory will guide understanding how Dutch newspapers frame climate change, offering insights into the dominant discourses within the Dutch media landscape. The Discursive Paradigm will shed light on the dynamics of discourse, argumentation, and emotions in the policy-making process, enabling an exploration of the potential impact of

media frames on policy outcomes. Lastly, Agenda-Setting Theory will provide a perspective on how media coverage might influence public attention and shape policy priorities.

#### 3.5.2 Relevance to the Research Questions and Objectives

The collective application of these theories is central to addressing the research questions. These theories will not directly inform the data analysis process, which will be detailed in the subsequent methodology chapter using Directed Content Analysis (DCA). However, they are vital to interpreting and contextualising the findings, forming the theoretical backbone of the discussion chapter.

The primary objective of this research is to pinpoint and characterize the dominant frames on climate change within Dutch newspapers and gauge their presence in debates held by the House of Representatives. This objective connects strongly with Framing Theory and will be achieved by applying DCA in the methodology chapter.

The secondary objective is to investigate the potential consequences of media coverage on policy-making outcomes in the Netherlands. This objective is supported by both the Discursive Paradigm and Agenda-Setting Theory, serving to guide the interpretation of how discourse and argumentation mould policy decisions and how media coverage can influence policy priorities.

In summary, the integration of Framing Theory, Discursive Paradigm, and Agenda-Setting Theory into the research design equips this study to answer its research questions effectively. By incorporating these theories into the discussion chapter for interpretation of the results, the research seeks to deliver a comprehensive understanding of the intricate relationships between media coverage, public discourse, and policy-making processes, particularly in the context of climate change in the Netherlands.

The following methodology chapter will provide further details of the analytical process using DCA.

## 4. Methodology

#### 4.1 Introduction

This chapter outlines the methodology employed in this study to investigate the dominant discourses and frames on climate change in Dutch newspapers and examine their presence in House of Representatives debates. Directed content analysis (DCA) will be applied to both newspaper columns and political arguments to assess the potential impact of media coverage on policy-making outcomes in the Netherlands. This research will contribute to the existing body of literature on climate change framing, public opinion, and policy development, with a focus on the Dutch context. The research design encompasses a qualitative framing approach utilising Directed Content Analysis (DCA) (Lune & Berg, 2017, p. 192). Guided by the theoretical framework, DCA facilitates addressing the study's research questions and fosters a comprehensive understanding of climate change discourse in Dutch newspapers and its prospective influence on policy-making outcomes in parliament.

## 4.2 Directed Content Analysis

This thesis adopts DCA for data analysis, involving application of codes and categories anchored in theories relevant to the research focus (Lune & Berg, 2017, p. 183). The initial codebook for DCA in this study builds on the work of Chetty et al. (2015), Nisbet (2010), and Blue (2015). Researchers apply DCA by immersing themselves in the raw data, considering both established and potential emergent themes, with the theoretical framework influencing the code categories (Lune & Berg, 2017, p. 183). Thus, codes are developed a-priori and are inductively identified within the data.

## 4.3 Sequence of Analysis

The analysis follows a typical sequence for qualitative analysis (Lune & Berg, 2017, p. 184):

- 1. Collect and structure data into a readable text format.
- 2. Develop codes analytically and inductively from the data and affix them to pertinent notes or transcripts.

- 3. Transform codes into themes or categorised labels.
- 4. Categorise materials based on these labels, revealing patterns, relationships, similarities, and differences.
- 5. Sort and assess materials to identify significant patterns and processes.
- 6. Examine patterns about previous research and hypotheses, formulating a limited number of generalisations.

## 4.4 Analytical Tool

The qualitative data analysis software ATLAS.ti is used for DCA. While the software does not code the data autonomously, it aids in managing, organising, and reconfiguring the data, thereby making the analytical process more efficient (Saldaña, 2015, p. 31). ATLAS.ti also provides visual displays to assist in exploring, analysing, and presenting relationships within the data (Lune & Berg, 2017, p. 198).

## 4.5 Analysis Approach

The analysis is conducted in Dutch, with translations provided by the researcher, a native Dutch speaker aware of the cultural context. This proficiency facilitates examining both manifest content (visible, countable elements) and latent content (underlying meanings conveyed by the discourse) (Lune & Berg, 2017, pp. 186–187). The initial codebook, including pre-determined categories of codes based on research by Chetty et al. (2015), Nisbet (2010), and Blue (2015), is available in the Appendix. The coding process is carried out by a native Dutch speaker, with the unit of analysis being a unique newspaper column and the level of study focusing on individual phrases.

## 4.6 Initial Coding Scheme

The initial coding scheme was devised to expose a variety of expected discourses on climate change within Dutch newspaper columns and House of Representative debates. By

acknowledging the complexity and diversity of climate change narratives, this scheme underscores the intricate nature of climate change framing.

This initial coding scheme predominantly features frames derived from Chetty et al. (2015). This frame typology is grounded in issue-specific frames drawn from a host of preceding climate change framing studies (McComas & Shanahan, 1999; Zehr, 2000; Dispensa & Brulle, 2003; Brossard et al., 2004; Kenix, 2008; Howard-Williams, 2009; Nisbet, 2010 as cited in Chetty et al., 2015, p. 5). It broadly categorises themes and issues within climate change media coverage.

The structure of this typology, founded on a generalisable model by Nisbet (2009), groups frames with shared attributes like international politics, domestic politics, and public accountability. There is, however, a slight reduction in sensitivity due to the consolidation of frames. These frames capture a wide range of viewpoints, from the social progress frame's optimistic perspective to the debates and controversies encapsulated in the scientific controversy frame. The selection of these frames reflects the broad scope of climate change discourse, inviting an examination that encompasses technical, scientific, as well as social, political, and ethical aspects of the issue.

Additional frames have been informed by Blue (2015) and Nisbet (2010). The Imminent Catastrophe Frame, adapted from these sources, presents climate change as a looming disaster, mirroring the often-seen urgency in climate change discussions. Furthermore, issue-specific frames from Nisbet (2010) offer valuable insight into how political and ideological biases can shape climate change framing.

In line with the first research question (RQ1), which seeks to unearth discourses or frames within Dutch newspaper columns on climate change, the coding scheme incorporates various frames that reflect the multifaceted nature of climate change discourse. These include the Social Progress Frame, Morality Frame, Politics Frame, and Scientific Controversy Frame.

Some frames that overlap were intentionally separated to more accurately depict the nuanced ways in which differing discourses shape climate change conversations. Science-focused frames were kept separate to enable a more detailed exploration of how science is portrayed and debated within media and politics.

The second research question (RQ2) scrutinises how these discourses or frames shape climate change policy-making in the Netherlands. The selected frames facilitate a more focused

examination of the relationship between media discourses and policy-making. Identifying dominant frames in newspaper columns and parliamentary debates enables us to determine if shared patterns exist, and assess the potential influence of media discourse on policy discussions.

The inclusion of frames addressing both economic and scientific perspectives heightens the ability to probe the dynamics present in policy-making discourse, as illustrated by the Catastrophic Impact Frame.

To avoid potential confusion caused by overlapping frames, future iterations of the codebook should include clear coding criteria that specify how to code instances of multiple frames appearing within the same media piece. Supplementary codes could be introduced for instances where frames are combined.

In conclusion, the frame selection has been meticulously constructed to shed light on the diverse discourses present within Dutch newspaper columns on climate change and their influence on policy-making. The detailed focus and specific concentration on different aspects of climate change within the frames fortify this study's comprehensive understanding of the topic.

To put the concepts and theories outlined in the literature review into operation, this study will utilise directed content analysis (DCA) to identify and analyze media frames within Dutch newspaper columns. The subsequent section will clarify the process of developing a coding scheme based on the frames specified in the literature review, along with methods used to measure the influence of these frames on policy-making.

DCA, as a method, offers a more structured approach than traditional content analysis. It involves identifying key concepts or variables from existing theory or previous research as initial coding categories and determining operational definitions for each (Hsieh & Shannon, 2005, p. 1281). The analytic activities are then executed in a specific sequence, as commonly applied in prior qualitative analysis (Lune & Berg, 2017, p. 184).

Coding commences with pre-determined codes. Any data unsuitable for these pre-set codes are identified and scrutinised to ascertain whether they suggest a new category or a subcategory of an existing code. Depending on a category's 'type and breadth', further inquiries may require subcategories to be distinguished. Newly found categories may offer an alternate perspective on the phenomena or contribute to enhancing, expanding, and enriching the theory

(Ibid, p. 1283). The initial coding scheme is developed before starting the analysis. Additional codes are inductively created as the study progresses, which may lead to modification or changes in the coding scheme. DCA thus allows for the extension or modification of current theories (Hsieh & Shannon, 2005, p. 1286).

The decision to combine frames from Chetty et al. (2015) and Blue and Nisbet is driven by the necessity to examine climate change framing in the Dutch Parliament from many perspectives. While the frames from Chetty et al. provide a solid foundation for understanding the economic, policy, and scientific aspects of climate change discourse, those from Blue and Nisbet add depth by investigating its cultural, moral, and political dimensions. Each frame captures a unique facet of the climate change discourse that is not addressed by others. For instance, an economic frame might analyse the costs and benefits of climate change measures, whereas a moral frame could focus on its ethical implications.

Based on their respective source theories, operational definitions for each frame have been provided in the intial coding scheme in the Annex. Moreover, the DCA methodology applied in this study allows for the emergence of new frames or subcategories during the study, further enhancing its depth and comprehensiveness.

#### 4.7 Sample Selection and Data Collection

This section outlines the sample section and data collection.

#### 4.7.1 Sample Selection and Population

The sample selection process will involve two main sources: Dutch newspaper columns and House of Representatives debates. A comprehensive and diverse sample of newspapers was selected to ensure a complete understanding of climate change discourse in the country. For the analysis of House of Representatives debates, relevant transcripts were collected based on specific criteria related to climate change, the time frame under consideration, and the presence of key policy decisions or events.

The directed content analysis (DCA) will be conducted on a collection of opinion pieces from five major Dutch national newspapers and House of Representative debates. The newspaper sample includes two daily quality newspapers: the centre-left de Volkskrant and the

liberal, centre-right NRC Handelsblad. The analysis encompasses a wide range of the Dutch political spectrum, including de Telegraaf, de Volkskrant, and NRC Handelsblad. The rightwing de Telegraaf represents the tabloid press and is among the Netherlands' most popular and well-known newspapers (Leruth et al., 2017, p. 105). De Telegraaf is also characterised as having a "popular format" (Koopmans & Statham, 2010, p. 52). The left-wing Trouw, another quality daily newspaper, and the right-wing Algemeen Dagblad, classified as a "popular" newspaper, are also selected (Bakker & Vasterman, 2007).

#### 4.7.2 Time Frame and Focus

In alignment with the approach taken by Dirikx and Gelders (2010, pp. 735-736), this study will focus on critical moments in the climate change debate, specifically during the annual United Nations Conferences of the Parties (CoPs) meetings. The UN CoPs are the official organisations responsible for implementing the Kyoto Protocol. The authors' initial analysis of climate change articles in Dutch and French newspapers showed that the subject was infrequently covered, except during significant events such as international summits. These "critical discourse moments" (Carvalho and Burgess, 2005: 1461, as cited in Dirikx & Gelders, 2010, p. 735) were chosen as the focus of their study because they are the times when the public's understanding of climate change is most likely to be influenced.

By concentrating on the period surrounding the CoPs when analysing climate change framing in newspapers, several benefits arise. Firstly, climate change becomes a prominent theme in newspapers during these critical discourse moments, such as international summits, potentially significantly impacting public understanding of the issue. Secondly, while CoPs prioritise policy matters over scientific knowledge, columns published during these events offer valuable contextual information on climate change.

Given the time constraints of this thesis, the research will focus on the most recent CoP events, namely CoP25; CoP26 and CoP27, to represent periods in which climate change was high on both public and political agendas in the Netherlands and internationally. This timeframe provides a manageable yet meaningful scope for data collection, analysis, and interpretation of results. Both the debates and columns targeted for collection took place in the corresponding month of each COP (November 2022, November 2021 and December 2019). This choice is based on the expectation that there will be more discussion and reporting about

climate change around these events, making it more likely that different frames will be addressed.

The period restriction and selection criteria may impact the results of this research. Specific frames that occur less frequently or fall outside the selected period may be overlooked. However, this research can still provide valuable insights into the discourse on climate change in Dutch media and politics.

#### 4.7.3 Data Collection - Columns and Opinion Pieces

For columns and opinion pieces, data was collected using the LexisNexis database using a specific keyword scheme. Articles are selected if two or content levels are combined: (1) articles must be columns or opinion pieces; (2) On a thematic level, columns must include at least one keyword from a list. Data collection stops when information 'saturation' has been reached, i.e., when no additional data is revealed in new rounds of investigation. Sometimes it was necessary to investigate individual columns on their respective websites further to check the author if that was not mentioned or to be sure the article in question was indeed column or opinion piece. A distinction also had to be made between regular and guest columnists, eliminating potential columns. The specific set of keywords related to climate change, Dutch policy lines, political figures, or events used to search for columns are as follows:

- 1. "Klimaatverandering" (Climate Change)
- 2. "Opwarming van de Aarde" (Global Warming)
- 3. "Emissies" (Emissions)
- 4. "Duurzaamheid" (Sustainability)
- 5. "Klimaatbeleid" (Climate Policy)
- 6. "CO2-belasting" (CO2 tax)
- 7. "Emissiehandelssysteem" (Emissions Trading System)
- 8. "Broeikaseffect" (Greenhouse Effect)
- 9. "Fossiele brandstoffen" (Fossil Fuels)

- 10. "Duurzame energie" (Sustainable Energy)
- 11. "Klimaatakkoord" (Climate Agreement)
- 12. "Groene economie" (Green Economy)
- 13. "Milieuvriendelijk" (Environmentally Friendly)
- 14. "Klimaatactie" (Climate Action)
- 15. "Klimaatadaptatie" (Climate Adaptation)
- 16. "Klimaatmitigatie" (Climate Mitigation)
- 17. "Stikstofcrisis" (Nitrogen Crisis)
- 18. "Klimaatwet" (Climate Law)
- 19. "Energieakkoord" (Energy Agreement)
- 20. "Conference of the Parties" or "COP" or "COP\*"

By relying on these keywords and a close reading, 74 appropriate opinion pieces were found, categorised, and analysed across November 2022, November 2021 and December 2019. The selected columns will be imported into ATLAS.ti for a directed content analysis using the predetermined frames from my codebook. The research will focus on specific elements of the text that align with these frames.

#### 4.7.4 Data Collection – Parliamentary Debates

In parallel, transcripts of plenary debates held in the House of Representatives were collected from the publically available website. The debates will be analysed similarly in ATLAS. ti, focusing on how different frames are used and their potential influence on policy-making. Regarding the selection of parliamentary debates, this study focuses on three key debates that occurred within the Dutch Parliament. The choice of these debates is not arbitrary but is underpinned by their relevance to the research question and the breadth of climate and energy policies they address. Three debates were carefully chosen due to their direct engagement with climate policy, national emissions, and energy transition planning.

The first debate on November 30, 2022, was titled 'Debat over de Klimaat- en Energieverkenning en de Klimaatnota'. This parliamentary discussion centered on Climate and Energy Exploration and the Climate Note. The key points of critique that emerged from this debate were the projected CO2 emission reductions and the efficacy of current climate policies in achieving the 2030 goals. Ideas brought to the table involved sector-wide emission monitoring, the creation of a European fund to incentivise sustainable business practices, and political initiatives to promote recycling and sustainable transportation. While skeptics raised concerns about climate change causality and the potential impact of climate policies on living standards, the minister reiterated the importance of the upcoming measures and proposed enhancements in the agricultural policy.

The second debate on November 2, 2021, was labeled 'Begroting Economische Zaken en Klimaat 2022'. The Dutch Parliament scrutinised the Ministry of Economic Affairs and Climate's budget, with a particular focus on climate, energy, and sustainability. The parliamentarians deliberated over the allocation of funds for industry sustainability, the potential for increased electrification and hydrogen use, financing mechanisms for the energy transition, international climate policy, and the role of entrepreneurs in this context. Critical voices were raised regarding spending decisions, corporate obligations, and potential economic implications of the proposed climate policies.

This debate was continued on November 4, 2021, in a session called 'Afronding behandeling begroting Economische Zaken en Klimaat'. The concluding discussions revolved around the necessity and funding of climate change measures, the role of hydrogen and nuclear power, the adequacy of the electricity grid capacity, labour market shortages, and industrial support. The parliamentarians also evaluated the economic impact of COVID-19 measures. Final decisions related to the debated issues were slated to be made on December 7, 2021.

The third debate was conducted on December 17, 2019, under the heading 'Debat over de Klimaat- en Energieverkenning 2019'. This time, the Dutch Parliament confronted the 2019 Climate and Energy Outlook with Minister Wiebes. The primary issues under consideration included national greenhouse gas emissions and the energy system up to 2030. The parliamentarians grappled with ambitious climate goals and the numerous challenges in realising these objectives. Topics such as CO2 reduction, the energy transition, future technologies, and the implications of the European Commission's Green Deal were at the heart of this debate.

These three debates offered profound insights into the evolution of the Dutch Parliament's climate and energy policy discussions and the variety of frames used to adress climate change. Once the data analysis is complete, I will synthesise my findings, interpret them in light of my research questions, and then draft the thesis. Therefore, these debates represent significant 'measuring points' for this study, offering a comprehensive overview of Dutch climate and energy policy development and discourse over a critical period. Through analysing these debates, this research can explore and elucidate the framing dynamics in climate policy discourse within the Dutch Parliament.

# 4.8 Methodological Rigour and Robustness

The integrity of the methodologies implemented in this study is fundamental to guaranteeing the trustworthiness of the outcomes and their possible impact on climate change dialogue and policy development. The methodological approach to climate change research often differs, potentially leading to inconsistencies in the results' reliability or generalizability. Prior research, such as those by Han et al. (2017), Gkiouzepas and Botetzagias (2017), and Chetty et al. (2015), underscored numerous constraints and obstacles within their methodologies, underscoring the necessity for extensive, context-specific, and audience-centered methods.

In this study, methodological choices aimed at enhancing rigour and reducing potential bias have addressed some of these concerns. A broad spectrum of Dutch newspapers has been sampled to capture a diverse and comprehensive representation of climate change discourse. Such an extensive approach allows for a deeper exploration of the distinctive nature of climate change framing in Dutch media and provides valuable insights into their potential influence on policy-making.

Moreover, the chosen research methods enable direct comparisons between Dutch newspaper framing and other media or country contexts, enhancing our understanding of the specificity and uniqueness of Dutch climate change discourse. Through this meticulous approach, this research contributes to the existing literature on climate change framing and its impact on public perception and policy development.

After discussing the methodologies and their robustness, the next section will explore some of the study's limitations and challenges.

# 4.9 Limitations and Challenges

This section will discuss the study's limitations, including potential biases or data sources' limitations. Strategies to mitigate these limitations, such as selecting a diverse sample of newspapers and employing multiple coders during the data analysis process, will be presented. Additionally, the potential challenges of directed content analysis, such as subjectivity in the coding process and the possibility of overlooking unique frames, will be acknowledged and addressed.

A directed content analysis aims to conceptually extend or validate a theoretical framework or theory (Hsieh & Shannon, 2005, p. 1281). Existing theory or research can help refine the research question, offer predictions about variables of interest or the relationships between variables, and assist in developing the initial coding scheme or code relationships (Hsieh & Shannon, 2005, p. 1281). As previously argued, the strength of this approach is particularly relevant to climate change framing research, where issue-specific frames have rarely been used despite their potential to provide the specificity needed to address the thesis's research question.

However, DCA has a significant limitation: Researchers approach the data with an informed yet strong bias, which may lead them to find data that supports rather than contradicts a theory (Hsieh & Shannon, 2005, p. 1283). On the other hand, DCA can support and enhance existing ideas. It underscores the fact that researchers are generally unlikely to operate from a neutral perspective, often associated with naturalistic designs (Ibid., 1283). Although this raises valid concerns, using issue-specific frames in the form of pre-determined categories based on research by Chetty et al. (2015), Nisbet (2010), and Blue (2015) primarily serves as a guide for the analysis rather than reinforcing the model itself.

# 5. Results

#### 5.1 Introduction

This chapter presents the empirical findings derived from the comprehensive analysis of Dutch media content and House of Representatives debates. Grounded in the established methodology and utilizing a coding scheme informed by the works of Chetty et al. (2015), Nisbet (2010), and Blue (2015), the analysis carefully distilled key frames from the gathered data.

Over the course of the analysis, the initial coding scheme evolved, expanding from 10 to 14 primary codes and introducing three subcodes to accommodate nuances in the discourse. The finalized hybrid coding scheme, detailed in the annex, integrates novel frames such as "Elitism or Class Conflict Frame" and "National Responsibility v Global Impact," while subdividing broad frames into more specific subframes. This refined scheme provides a more granular perspective on the complexity of the climate change discourse.

As the focal point of this study, these frames were then thoroughly analysed within the 1150 quotations linked in ATLAS.ti. This chapter will delve into the significance of the relative frequencies of these frames and the implications they hold for understanding the climate change discourse.

The disparity in the size of the source materials (newspaper columns and parliamentary debates) posed a challenge for the direct comparison of absolute frequencies. However, the utilization of normalised frequencies and relative frequencies in ATLAS.ti resolved this issue, ensuring a fair comparison of frame occurrences across the data.

The following sections will present detailed figures reflecting the most frequent frames across the columns and debates. Furthermore, patterns, trends, and relationships among these frames will be highlighted, providing a comprehensive view of Dutch media and politics's climate change discourse landscape.

However, while this chapter presents an extensive analysis of the identified frames, it stops short of a profound interpretation aimed at answering the research questions. The interpretation of these results and their implications in the context of climate change discourse in the Netherlands is reserved for the subsequent discussion chapter. This approach ensures that the results are organized and understandable before delving into their broader implications.

# 5.2 Coding and Analysis

This section emphasizes the adaptation of the initial coding scheme, explaining the process of refinement that occurred in light of the emerging discourse patterns discovered throughout the analysis. The decision to expand and refine the original coding scheme was based on the rich and diverse narratives within the examined texts, ensuring a comprehensive representation of the spectrum of climate change discourse.

The Politics frame originally encapsulated an extensive range of narratives within the political sphere regarding climate change. The Politics frame was divided into three subframes to offer a more detailed view of the political climate change discourse: Political Strategies, Political Conflict, and Political Inaction. This fragmentation better captured the strategic actions, internal conflicts, and instances of political inaction or inadequate responses to climate change. For instance, a quote exemplifying the Political Strategies subframe is: 'Just now, someone asked: what is the lobby of fossil companies in the ministry? I would like to see the lobby of all organisations...' (CDA, 2-11-2021). The Political Conflict subframe is illustrated by the quote 'With climate as a religious obsession, this cabinet throws billions, but without any result' (Groep Van Haga, 30-11-2022) and the Political Inaction subframe by 'When the Madrid climate summit lasted extra long over the weekend, expectations rose... Madrid was a failure.' (NRC, 18-12-2019). The subframes provide a thorough understanding of the various narratives, themes, and contrasting views within the political discourse, both in the media outlets and institutional settings.

Another key adjustment to the coding scheme was the introduction of the Elitism or Class Conflict Frame. This frame, exemplified by the quote, 'All flying there in private jets to decide with other climate fetishists what ordinary people are allowed and not allowed to do,' (Groep van Haga, 30-11-2022), came to light during the analysis of the 'Klimaat-en Energieverkenning en de Klimaatnota' debate. This frame brings to the fore the perception that climate policies are impositions from an out-of-touch elite onto the ordinary public, underlining the power dynamics and social inequalities within the discourse.

The Social Progress Frame, initially considered a viable frame, was found to be somewhat broad and all-encompassing. It was decided to replace it with three more distinct frames: the Industry Responsibility Frame, the Consumer Behaviour Frame, and the Systemic

Change Frame. The Industry Responsibility Frame is exemplified by the quote, 'If we want to gain support for climate policy, we must, of course, achieve our goals... A better environment doesn't start with oneself, but with Shell.' (SP, 30-11-2022). The Consumer Behaviour Frame is highlighted by the following quote: 'Chairperson. This cabinet has committed itself to reduce CO2 by 60% in 2030... for that, behavioural change is also necessary.' (D66, 30-11-2022). The quote underscores the Systemic Change Frame 'However, climate adaptation alone is not enough to cope with the effects of extreme weather: measures are needed that limit CO2 emissions...' (NRC, 02-11-2022). These refined frames allow a more profound dissection of specific aspects of the discourse, preventing potential overshadowing or neglect of specific narratives.

Lastly, an important nuance was captured in a modification to the Economic Competitiveness Frame. A sentiment repeatedly encountered in the analysed texts pointed to a perceived economic injustice related to the global efforts to mitigate climate change. This is exemplified by the quote, 'So, paying for CO2 reduction while what the Netherlands emits in an entire year, a country like China offsets in less than a week... It remains impossible to explain.' (PVV, 02-11-2021). The refined frame now accommodates this sentiment by probing whether the content discusses perceived financial imbalances or unfairness related to climate change mitigation efforts and whether it suggests that certain countries or groups bear a disproportionate financial burden.

In conclusion, the refined coding scheme, encompassing 14 primary codes, 3 subcodes, and various modifications, is equipped to facilitate an in-depth and nuanced analysis of climate change discourse in Dutch media and politics. The final coding scheme is provided in the Annex for detailed scrutiny."

## 5.2.1 Code Frequencies and Normalization Process

This section explains the methods utilised in the ATLAS.ti software to generate relative frequencies, normalise the data, and account for discrepancies in document sizes. ATLAS.ti provides a feature that facilitates the creation of tables, graphically representing the frequency of different frames' occurrence. The initial impression might suggest a conflict, as the chosen newspaper columns considerably vary in word counts, as detailed in the appendices. Further, this variance could ostensibly make comparisons between newspaper columns and House of

Representative debates based on absolute frequencies misleading due to their significant word

count differences.

Nevertheless, ATLAS.ti addresses these issues by adjusting the counts to normalized

frequencies, compensating for the varied document sizes. Furthermore, the software enables

the display of relative frequencies. The normalization functionality in code-document tables

allows for a confined form of quantitative analysis of qualitative data. This capability

significantly aids in exhibiting the findings of this chapter and offering a comprehensive

perspective on the distribution of different codes throughout the project.

5.2.2 Illustration of the frequencies across the different frames with the help of tables

A total of 1150 quotations were linked in ATLAS.ti to these 14 codes. While all codes

provide insight into how an actor can frame climate change, the subsequent paragraphs will

discuss the predominance of certain frames in the discourse. This will be illustrated using

relative code frequencies across the data to present the empirical results.

Fig. 1 Column relative code-document table of frames across debates and columns

Source: Author's construction.

42

		Columns 74 (**) 386	Debates  4 4 9 695	Totals
○ ◇ Catastrophic Impact Frame	(iii) 60	8,08%	2,70%	5,39%
○ ◇ Consumer Behaviour Frame	(iii) 62	3,71%	5,66%	4,68%
○ ◇ Economic Competitiveness Frame	<del>("")</del> 109	6,33%	9,64%	7,99%
○ ♦ Elitism or Class Conflict Frame	<del>""</del> 63	5,02%	5,14%	5,08%
○ ♦ Industry Responsibility Frame	<del>""</del> 155	8,30%	13,11%	10,70%
○ ♦ Morality Frame	(iii) 88	11,57%	4,24%	7,91%
○ ◇ National responsibility vs Global Impact Frame	<del>""</del> 60	5,90%	3,86%	4,88%
O O Politics Frame: Political Conflict	···n 90	7,64%	6,94%	7,29%
🔾 츳 Politics Frame: Political inaction	<del>""</del> 124	10,26%	9,13%	9,69%
🔾 🔷 Politics Frame: Political Strategies	<sup>(1</sup> 1) 148	8,95%	12,08%	10,52%
○ ♦ Science Frame	<del>""</del> 49	4,59%	3,21%	3,90%
○ ◇ Scientific Controversy and Economic Risk Frame	(iii) 9	0,66%	0,77%	0,71%
○ ◇ Scientific Controversy Frame	<sup>(1</sup> 17) 21	1,53%	1,67%	1,60%
○ ◇ Scientific Integrity and Accountability Frame	<del>""</del> 15	1,31%	1,03%	1,17%
○ ◇ Sustainable Economic Opportunity Frame	··· 74	4,15%	6,04%	5,09%
○ ♦ Systemic Change Frame	(iii) 184	12,01%	14,78%	13,40%
Totals		100 %	100 %	100 %

This table of Dutch climate change discourse brings to light the nuanced representation of frames in columns and debates. The "Industry Responsibility Frame", which emphasizes the roles and responsibilities of industries in mitigating climate change, appears more often in debates (13.11%) than in columns (8.30%). This suggests a proclivity in political discussions to hold industries more accountable for implementing sustainable practices and innovations, potentially due to the political sphere's capability to regulate and incentivise industry behavior.

The "Consumer Behaviour Frame" underscores the roles of individuals and communities in promoting sustainability, and records low frequencies in both columns (3.71%) and debates (5.66%). This implies a shift from individual actions towards systemic, industry-level changes in media and political discourse.

The "Systemic Change Frame", advocating the need for large-scale systemic changes, is dominant in both discourses. This frame constitutes 12.01% of columns and 14.78% of debates, reflecting a broad consensus on the necessity for substantial policy changes and institutional adaptations to combat climate change.

The "Morality Frame", with a higher prevalence in columns (11.57%) than in debates (4.24%), may indicate media's engagement with readers by appealing to their moral and ethical obligations. The lower frequency of debates suggests politicians' preference for practical, solution-oriented frames like Industry Responsibility or Systemic Change.

The "Politics Frames", comprising of elements such as "Political Conflict" (7.64% in columns, 6.94% in debates), "Political Inaction" (10.26% in columns, 9.13% in discussions), and "Political Strategies" (8.95% in columns, 12.08% in debates), exhibit a heightened presence within debates. This underscores the inherently political nature of these frames.

On the other hand, the "Scientific Frames", which include components like the "Science Frame" (4.59% in columns, 3.21% in debates), "Scientific Controversy and Economic Risk Frame" (0.66% in columns, 0.77% in debates), "Scientific Controversy Frame" (1.53% in columns, 1.67% in discussions), and "Scientific Integrity and Accountability Frame" (1.31% in columns, 1.03% in debates), appear less prominent in comparison. This pattern suggests that Dutch climate change discourse debates are more about responses to the crisis than the validity of the science itself.

The "Economic Competitiveness Frame", dealing with the economic implications of climate change actions, is well represented in columns and debates (6.33% and 9.64% respectively), implying the significance of financial considerations in climate change discourse.

The "Catastrophic Impact Frame", emphasizing the severe consequences of climate change, is more frequently observed in columns (8.08%) than in debates (2.70%). This could be attributed to the media's strategy to engage readers by highlighting potential disastrous impacts of climate change.

The "Sustainable Economic Opportunity Frame", reframing climate change as an opportunity for economic growth, shows slightly higher representation in debates (6.04%) than in columns (4.15%). This reflects the focus of political discourse on the potential economic opportunities arising from addressing climate change.

The "Elitism or Class Conflict Frame", suggesting that an out-of-touch elite drives climate change policies and discussions is relatively evenly distributed between columns (5.02%) and debates (5.14%). This indicates that concerns about elitism or class conflict are present, albeit not dominant, in both media and political discourse.

Lastly, the "National Responsibility vs Global Impact Frame", contrasting a nation's small CO2 emissions with the global impact of climate change, is slightly moremore prevalent in columns (5.90%) than debates (3.86%). This suggests that while the media may focus more on the need for global efforts, political discourse is likely more oriented towards national actions and responsibilities.

These findings reveal a sophisticated distribution of frames within the Dutch climate change discourse. Some structures, like the "Systemic Change Frame", are dominant in both media and political debates, while others, like the "Morality Frame" and "Catastrophic Impact Frame", have higher representation in columns. These insights into how climate change is communicated and understood in different social and political contexts are critical to shaping public perceptions and policy-making.

## 5.3 Results from the Analysis of Columns and Opinion Pieces

The analysis of columns and opinion pieces provided several approaches to climate change. The frequency of these frames is outlined in this section, and detailed instances of these frames are discussed in the subsequent section.

#### 5.3.1 Presentation of the most frequent frames

The frames that were most frequently observed in the columns and opinion pieces were the Systemic Change Frame (12.01%), Morality Frame (11.57%), and Politics Frame: Political Inaction (10.26%).

The Systemic Change Frame, emphasizing the need for sweeping institutional changes to combat climate change, was the most frequently encountered frame, with 12.01% of the analysed texts exhibiting this frame. This suggests a dominant narrative in the columns and opinion pieces about the necessity for broad, systemic solutions to climate change, including large-scale policy and societal adaptations.

The Morality Frame, portraying climate change and efforts to mitigate it as a moral or ethical issue, was observed in 11.57% of the columns and opinion pieces. This indicates a substantial discourse that frames climate change as a matter of ethical responsibility, often highlighting moral obligations towards future generations and less developed nations.

The Politics Frame: Political Inaction, which scrutinises or criticises political actors for their lack of action or inadequate response to climate change, was found in 10.26% of the analysed texts. This suggests a significant critique in the discourse that political actors are not doing enough to address climate change.

## 5.3.2 Detailed Instances of These Frames

#### Systemic Change Frame

The systemic change frame emphasises the importance of sweeping institutional and policy adaptations in addressing climate change. It highlights the necessity for immediate action on an institutional level, rather than relying on individual behaviours or smaller-scale solutions. A quote from NRC exemplifies this frame: "A damage fund will not temper this frankly worrisome dynamic. What is needed are faster, actual emission reductions." (NRC, 22-11-2022). This illustrates the belief that climate change requires immediate and substantial changes system-wide rather than superficial actions or mere damage control.

#### Morality Frame

The morality frame encompasses the ethical considerations related to climate change, particularly the disparities in responsibility and impact between nations. The statement emphasizes the moral responsibility of more industrialized nations, which historically have contributed more to carbon emissions, to spearhead efforts in tackling climate change. In *Algemeen Dagblad*, this frame is depicted as follows: "Two thirds of greenhouse gas emissions are attributed to Europe, the US, Japan, Canada, and most recently, China". All these countries collectively do not wish to tighten their belts." (AD, 21-11-2022). The *NRC* also employs this frame when stating, "For nearly two decades, wealthy countries have avoided a discussion about responsibility," and "It shows that rich countries still do not acknowledge their responsibility." (NRC, 12-11-2022). These quotes highlight the perceived moral duty of wealthier countries to bear a more significant burden of climate action, reflecting their larger historical and current contributions to greenhouse gas emissions.

### **Politics Frame: Political Inaction**

The Politics Frame: Political Inaction criticises political actors for their perceived inadequacies or delays in addressing climate change. It implies a sense of urgency and dissatisfaction with the current political responses to the climate crisis. One quote from Trouw characterizes this frame: "The just-concluded climate conference in Egypt did not make any progress at all. It's certainly not because all the countries that gathered there are short-sighted." (Trouw, 29-11-2022) NRC's statement further captures the sentiment of inaction and frustration, "A lot was postponed in Madrid. Delay is a tried and tested escape when negotiations are stuck. But in the case of climate issues, delay is a luxury that the world can no longer afford." (NRC, 18-12-2019) Both quotes underscore the perceived lack of progress in political spheres, attributing the stalemate not to a lack of understanding but to evasion and delay tactics.

## 5.4 Results from the Parliamentary Debates

In the analysis of the parliamentary debates, the frequency of different frames is observed to understand the discourses that have predominated in these official discussions on climate change.

## 5.4.1 Presentation of the most frequent frames

The most frequently observed frame in the parliamentary debates is the 'Systemic Change Frame', with a frequency of 14.78%. This frame highlights the necessity for large-scale, systemic changes to address the climate crisis effectively, reflecting the understanding among parliament members that significant adaptations in institutional structures and policies are required to combat climate change.

The second most frequently used frame is the 'Industry Responsibility Frame', which has a frequency of 13.11%. This frame emphasizes the crucial role of industries in mitigating climate change through sustainable practices and technological innovation, suggesting a belief among parliament members that enterprises have a significant part to play in climate change solutions.

Following closely, the 'Politics Frame: Political Strategies' is used 12.08% of the time, showing the focus on strategic approaches adopted by political actors in the fight against climate change.

#### 5.4.2 Detailed Instances of These Frames

## The Systemic Change Frame

The Systemic Change Frame, frequently observed in both parliamentary debates and columns, underscores the need for broad, institutional changes as a means to combat climate change effectively. It typically expresses a sense of urgency and dissatisfaction with current measures, calling for more immediate, substantial changes on an institutional level. An instance of this frame is evident in the words of a representative from PvdA: "I miss that urgency. I am familiar with all the plans you are submitting. In the end, I look at our official accountant, the PBL says: it is far from enough; more measures are needed now." (PvdA, 30-11-2022). This quote showcases the sense of urgency and the need for systemic change that characterises this frame. The reference to PBL's assessment emphasizes that current efforts fall short of what is necessary to address the climate crisis effectively.

#### *Industry Responsibility Frame*

The Industry Responsibility Frame stresses the pivotal role industries have in mitigating climate change, often juxtaposed with the relatively lesser impact of individual consumer behaviors. This frame asserts that industries, huge emitters, need to take significant responsibility and action in climate change solutions. This is clearly captured in the quote from SP: "If we want to gain support for climate policy, we must, of course, achieve our goals. But these goals don't mean much if there are no underlying principles that we must also support together. I'm talking about neoliberal climate policy, where you blame the consumer for climate change while the big emitters go about their business. A better environment doesn't start with oneself but with Shell." (SP, 30-11-2022). The framing also encompasses the critique of current and planned activities by large corporations, as expressed in the quote: "Meanwhile, the international plans of oil and gas companies are disastrous. Over the next five years, almost 1.5 trillion dollars will be invested in new oil and gas extraction by companies including Shell,

resulting in additional emissions equivalent to 1,200 new coal-fired power plants." (SP, 17-12-2019). These quotes highlight the perception of large industries' disproportionate contribution to climate change and the need for them to take substantial responsibility and action.

#### **Politics Frame: Political Strategies**

The Politics Frame: Political Strategies focuses on the strategic approaches political actors adopt to combat climate change. It emphasizes the necessity for both domestic and international cooperation and strategy in tackling the crisis. An example of this frame can be observed in a statement from a CDA representative: "After tough negotiations, the conclusion was that we need to deliver what we agreed upon in Paris and that the developing countries if we want to stay below 2°C, should already start contributing now."(CDA, 17-12-2019). This quote underscores the importance of international cooperation and commitment, reflecting on the need for adherence to agreements like the Paris Agreement and the necessity for developing countries to partake in mitigation efforts. This highlights the strategic aspect of the political response, where negotiations, agreements, and shared responsibilities form the backbone of an effective climate strategy.

# 5.5 Comparative Analysis of Frames

In this section, frames identified in both the media analysis and the parliamentary debates are compared, noting patterns, trends, and differences that emerge. These comparative insights help understand how climate change discourse in political and public spheres align or diverge and the implications of these patterns.

## 5.5.1 The Systemic Change Frame

The Systemic Change Frame was the most prominent in both the media and parliamentary debates. It emerged in 12.01% of media content and 14.78% of parliamentary debates. This shared pattern signifies an agreement regarding the necessity for comprehensive, systemic modifications to respond to climate change, connecting political and public dialogues. The somewhat elevated frequency of parliamentary debates may imply a heightened urgency among lawmakers, or it may represent a more structured conversation concerning policies and frameworks in the parliament.

#### 5.5.2 The Industry Responsibility Frame

The Industry Responsibility Frame was the second most common frame in the parliamentary debates (13.11%), whereas it was not as prominent in the media discourse. This may indicate a stronger focus in the political sphere on the role of industries in mitigating climate change. It could also reflect politicians' efforts to pressure industries into more sustainable practices and technological innovation.

## 5.5.3 The Morality Frame and the Politics Frame: Political Inaction

The Morality Frame was quite common in the media discourse (11.57%), emphasizing climate change as a moral or ethical issue. However, it did not feature as prominently in the parliamentary debates. This discrepancy could reflect a more emotional and ethically driven climate discourse in the public domain, possibly aimed at mobilising readers around the issue. The Politics Frame: Political Inaction was also more common in the media discourse (10.26%) than in the parliamentary debates, which could be an indicator of a critical perspective on the political response to climate change.

#### 5.5.4 The Politics Frame: Political Strategies

The Politics Frame: Political Strategies were more common in the parliamentary debates (12.08%) than in the media. This difference likely reflects the nature of parliamentary discourse, focusing more on policy negotiation, strategy, and implementation.

#### 5.6 Conclusion

In conclusion, the comparison reveals some alignment in the framing of climate change in the media and parliamentary debates, particularly around the necessity of systemic changes. However, clear differences also emerge, with the press placing a higher emphasis on the moral and ethical aspects of climate change and criticism of political inaction, while the parliamentary debates focus more on industry responsibility and political strategies. This contrast likely reflects these two spheres' different roles, audiences, and aims. The findings suggest that while

there is some common ground, each domain uses specific frames more prominently to address its unique concerns and objectives.

# 6. Discussion

## 6.1 Introduction

This thesis sought to answer two primary research questions:

- 1. What discourses or frames are embedded in Dutch newspaper columns on climate change?
- 2. How do these discourses or frames influence policy-making on climate change in the Netherlands?

A content analysis approach was utilized to uncover the prevailing discourses and frames on climate change in Dutch media and their potential influences on policy-making. Through examining Dutch newspaper columns and House of Representatives debates, the study cast light on how media discourse may shape both public opinion and political decision-making concerning climate change.

The findings unveiled a series of key frames, such as the Systemic Change Frame, the Industry Responsibility Frame, and several Politics Frames. Each of these frames, with its unique focus and perspective on climate change, manifested differently across media and political debates. The forthcoming discussion chapter will delve into these results, scrutinizing their implications and the intersections they reveal between the media discourse and policymaking.

## 6.2 Discussion on the Context of Frames in Columns and Opinion Pieces

This section will examine the implications of the most frequently used frames in the media. The focus will be on the reasons these particular frames might be prevalent and how they may influence public understanding of climate change, thus addressing the first research question.

## 6.2.1 The Systemic Change Frame

By the framing theory, the frequency of the Systemic Change Frame within media discourse reveals its interpretative role. The media uses this frame as a lens to present climate change not merely as an environmental issue but as a complex societal problem that necessitates systemic solutions. For example, one column states:

"But the focus on individual behavior is nonsensical, because major change only comes through regulation and system change. Only if flying became much more expensive or rationed would people choose alternatives, and fewer planes would fly. And alternatives would become relatively cheaper and investments more profitable." (Volkskrant, 14-11-2022)

This dominance of the Systemic Change Frame could be an indication of the Netherlands' growing acknowledgement of climate change as an issue that extends beyond environmental damage, requiring comprehensive changes in social, political, and economic systems.

Following Entman's framing theory, media frames can significantly mould public opinion by emphasizing specific elements of complex issues such as climate change. Thus, the prevalence of the Systemic Change Frame catalyzes public demand for systemic policy changes and comprehensive climate strategies. This is consistent with the agenda-setting theory which suggests that the media can elevate the importance of particular issues in the public's mind.

#### 6.2.2 The Morality Frame

The high frequency of the Morality Frame in media discourse shows the active role of Dutch media in moral entrepreneurship – shaping public understanding of climate change as a moral and ethical issue. An article encapsulates this by stating:

"It should have happened much earlier. Because it is painfully unfair that vulnerable countries, ranging from small island states in the Pacific Ocean to the poorest countries in Africa, are being hit hard by the consequences of climate change, such as storm surges, floods, prolonged droughts and increasingly unpredictable weather, without can do something about it yourself. And it is even more painful that the countries that caused global warming suffer much less from the consequences. Not because they are less affected by it, but because they have the money to arm themselves against it and to repair the damage" (NRC, 12-11-2022)

This finding correlates with the framing theory's assertion that frames heavily influence public understanding and discourse around social issues. By utilizing the Morality Frame, the media potentially adjusts public perception to view climate action as a moral imperative. This might subsequently mould public expectations for policies that focus on climate justice and equity. Such dynamics reinforce the discursive paradigm, underscoring the impact of discourse on shaping societal values and attitudes

#### 6.2.3 The Politics Frame: Political Inaction

The Politics Frame: Political Inaction reflects the critical role of media in scrutinising government action and policy-making. One column criticizes political leaders by saying:

"Rutte saw opportunities for a robust Dutch climate policy earlier this year after reading an alarming climate report, claiming that "the Netherlands can become the number one climate Olympian". However, he does not want to sign this deal; he thinks that is a matter for the new cabinet. A purely formal stance, which cannot be reconciled with the urgency with which the climate crisis must be faced." (Trouw, 06-11-2021)

By spotlighting perceived political inaction on climate change, the media might be fostering a public narrative of dissatisfaction, pressuring more decisive policy action. The framing theory elucidates this dynamic, suggesting that continuous framing of political inaction can sculpt public opinion, intensifying the demand for bolder climate policies. This aligns with the agenda-setting theory's tenets, demonstrating the media's power in dictating public priorities and concerns. This discussion, based on the frames observed in media discourse, provides essential insights into how the media in the Netherlands perceives climate change and how it influences public expectations from policymakers. A closer examination of the frames identified within parliamentary debates and a comparative analysis will enrich our understanding of the interplay between media and political discourses in shaping the Netherlands' climate policies.

# 6.3 Discussion on the Context of Frames in Parliamentary Debates

Following a similar approach, this section will interpret the implications of the identified frames within parliamentary debates. It will analyze why these frames might be preferred and their potential impact on policy decisions, thereby addressing the second research question.

Just as media shapes public opinion, parliamentary debates shape policy decisions that ultimately direct the country's response to climate change. In this regard, understanding the prevalence and implications of specific frames within parliamentary debates is crucial. This section aims to interpret these frames, offering insights into their preference and potential impact on policy decisions, thereby addressing the second research question: "How do these discourses or frames influence policy-making on climate change in the Netherlands?"

## 6.3.1 The Systemic Change Frame

The Systemic Change Frame stands out in its prevalence, representing a sense of urgency and the need for significant, institutional changes to combat climate change effectively. Its frequent usage suggests that parliamentarians are acutely aware of the pressing nature of the climate crisis and the need for systemic transformation rather than incremental changes. It also indicates that parliament members understand the need for reevaluating and restructuring current systems and policies to develop more sustainable alternatives. For example, one Member of Parliament highlighted:

"The climate policy needs not only to improve; there also has to be a fundamental system change" (PvdD, 30-11-2022)

Additionally, another Member of Parliament stressed:

"But if we really want to move towards system changes, then wouldn't we have to reduce air traffic in the mobility system, but in such a way that there are good alternatives for travelers?" (PvdA, 17-12-2019)

## 6.3.2 The Industry Responsibility Frame

The prominence of the Industry Responsibility Frame indicates a growing acknowledgment among policymakers of the pivotal role industries plays in climate change. Recognizing that

large-scale sectors contribute significantly to climate change can have substantial implications for policy decisions. It could lead to stricter regulations, incentivised sustainable practices, and more stringent corporate accountability. An example from the parliamentary debates can illustrate this point:

"I ask the minister to seriously look at what has been set on a certain track that does not belong there and which could possibly cause taxpayers' money to leak away, money that could be better spent on insulating homes and reducing energy bills, and therefore not on exempting the industry, because they speak out loudly or because they deploy a slew of lawyers and intimidate the ministry. (SP, 30-11-2022)."

## 6.3.3 The Politics Frame: Political Strategies

The Politics sub-frame: Political Strategies, was significant, reflecting the strategic approaches adopted by political actors in combatting climate change. The utilization of this frame suggests an awareness among parliamentarians of the necessity for domestic and international cooperation. Emphasis on strategic approaches may influence the policy-making process by encouraging greater adherence to international agreements, focusing on cooperation and shared responsibilities, and directing resources towards strategic, long-term solutions rather than short-term fixes. This stance is evident in the following quote from a parliamentary debate:

"And what does the cabinet do? Move Europe to set the target at 55% CO2 reduction by 2030, and also applaud Timmermans' Green Deal." (SGP, 17-12-2019)

In conclusion, the context of frames within parliamentary debates provides valuable insights into the climate change narrative among policy-makers. The prevalence of these frames indicates an understanding of the gravity and complexity of the climate crisis and guides the direction of policy decisions. However, the use of these frames also underscores the challenges ahead, suggesting that systemic change, industry responsibility, and strategic cooperation are crucial yet daunting tasks in the policy-making landscape.

## 6.4 Comparative Analysis of Frame

This segment delves into the patterns, trends, or differences identified through the comparative analysis of frames in both media and parliamentary debates, shedding light on the discourse on climate change in these domains.

The Systemic Change Frame, prevalent in both the media and parliamentary debates, suggests a broad consensus on the need for comprehensive changes to effectively address climate change. This shared understanding between the media and political actors could amplify the call for systemic changes, facilitating their implementation. The slightly higher frequency of parliamentary debates might indicate a more pronounced sense of urgency among policymakers or reflect a more structured discussion around necessary policies and frameworks.

On the other hand, differences in frame usage reveal insightful aspects of each sphere's focus and intentions. The Industry Responsibility Frame, while second most common in parliamentary debates, was less prominent in media discourse. This discrepancy might indicate a stronger political focus on industrial contributions to climate change and the need for more sustainable practices within these sectors. It might also reflect politicians' efforts to pressure industries, marking a clear area where media and politics diverge in their climate change discourse.

Similarly, the Media's emphasis on the Morality Frame and the Politics Frame: Political Inaction, less present in the parliamentary debates, hints at a more ethically driven and critical climate discourse in the public domain. It shows that the media plays a significant role in highlighting the moral and ethical dimensions of climate change, as well as scrutinizing political responses or lack thereof.

In contrast, the Politics Frame: Political Strategies, being more prevalent in parliamentary debates than in media, aligns with the nature of parliamentary discourse, which revolves around policy negotiation, strategy, and implementation.

In summary, the comparative analysis of frames needs to include some alignment in media and parliamentary climate change discourse, particularly around the necessity of systemic changes. Nevertheless, distinct differences also exist. The media tends to emphasise the moral and ethical aspects of climate change and criticism of political inaction more, while parliamentary debates focus more on industry responsibility and strategic political responses.

These variations reflect the unique roles, audiences, and objectives of these two spheres and underscore how different discourses can complement and influence each other in shaping the broader narrative around climate change.

## 6.5 Implications of Findings

This section will discuss the broader implications of these findings for understanding climate change discourse in the Netherlands and their potential influence on policy-making. The results of this study hold important implications for understanding climate change discourse in the Netherlands and its potential influence on policy-making.

The prominence of the Systemic Change Frame in both the media and political discourse underscores a shared understanding of the need for comprehensive, systemic changes to address climate change effectively. This alignment suggests a significant societal momentum for systemic solutions that could potentially expedite the implementation of robust climate policies and practices. It indicates that both the public and political actors are likely receptive to comprehensive measures that tackle the root causes of climate change.

The Industry Responsibility Frame, while more pronounced in parliamentary debates, underlines the expectation from policymakers for industries to undertake significant responsibility in climate change mitigation. The less pronounced, yet still present, emphasis on this frame in media discourse might encourage greater public scrutiny of industrial practices and support political measures aimed at curbing industrial emissions.

Divergences between the media and political discourse, such as the media's emphasis on the Morality Frame and criticism of political inaction, highlight areas of potential tension or disconnect. These differences could influence public sentiment and potentially sway political decision-making. The media's moral framing and scrutiny of political inaction might heighten public demand for ethical considerations and accountability in climate policies, pressuring politicians to act accordingly.

The prominence of the Politics Frame: Political Strategies in parliamentary debates reflects the nuanced and strategic nature of policy negotiations and international climate diplomacy. Comprehending this aspect can enable the public to recognise the intricacies of policy-making, thereby fostering more enlightened discussions.

In essence, the study's findings offer beneficial perspectives into the intricate interplay between media narratives and political decision-making processes in the Netherlands. The research uncovers areas of agreement that could potentially stimulate substantial policy modifications and areas of disparity that necessitate attention. The results shed light on how different frames can shape public understanding and sentiment towards climate change, influencing the landscape of climate policy. Understanding these dynamics is crucial for crafting effective climate communication strategies and policies that resonate with public sentiment and successfully drive systemic change.

## 6.6 Limitations and Future Research

This segment will acknowledge the research limitations and suggest future avenues of exploration based on these findings.

While this study offers valuable insights into the framing of climate change discourse in Dutch media and parliamentary debates, it is essential to acknowledge its limitations. Firstly, the analysis was limited to Dutch newspaper columns and parliamentary debates. As a result, it does not entirely encapsulate the breadth of media representation or political discourse on climate change within the Netherlands. Subsequent studies could broaden the scope to include other media forms such as television, radio, and social media, as well as other platforms facilitating political discussion.

Secondly, the framing analysis applied in this study focused on specific frames, which may have overlooked subtle, emergent frames or nuances within the mainframes. Future research could delve deeper into subframes within these main categories or explore the existence of additional, less dominant frames.

Additionally, while this study identified and compared prevalent frames in the media and political discourse, it did not measure the direct impact of these frames on public opinion or policy-making. This remains a critical area for future exploration. Future studies could incorporate public opinion surveys or policy analysis to better assess the influence of these frames.

The temporal limitation of the study, which only included columns and debates up to a specific date, may also affect the conclusions drawn. As climate change discourse is dynamic

and evolving, future research should continue to monitor these trends over time to account for potential changes.

Finally, the cross-cultural adaptability of the findings might be restricted due to the study's exclusive focus on the Dutch context. Climate change discourse and policy-making are informed by unique national circumstances that encompass environmental, social, economic, and political factors. Consequently, parallel analyses conducted in different countries would contribute to contrasting and comparing the framing of climate change within various national contexts.

Despite these limitations, the study lays the groundwork for future research into the connection between media narratives and political debates concerning climate change. It emphasizes the significance of understanding the framing of climate change and the potential influences these frames may have on public perception and policy-making. The findings suggest several avenues for future exploration, contributing to our overall understanding of climate change discourse and its implications.

#### 6.7 Conclusion:

This discussion chapter delved deeper into the results obtained through a content analysis of Dutch newspaper columns and parliamentary debates on climate change. The study answered the first research question—'What discourses or frames are embedded in Dutch newspaper columns on climate change?'—by identifying three prevalent frames: the Systemic Change Frame, the Industry Responsibility Frame, and the Politics Frames, with the Politics Frame: Political Strategies and Politics Frame: Political Inaction as notable subframes.

The Systemic Change Frame, emphasising the necessity of broad, institutional changes, and the Industry Responsibility Frame, focusing on the roles of industries in climate change mitigation, were frequently used in both media and political debates. However, the press also emphasized the moral and ethical aspects of climate change and criticized political inaction, creating a divergence from parliamentary debates, which instead focused more on industry responsibility and political strategies, as highlighted by the Politics Frame: Political Strategies subframe.

About the second research question—'How do these discourses or frames influence policy-making on climate change in the Netherlands?'—the identified frames, by their prominence in public and political discourse, potentially influence policy-making by shaping the understanding of the issue and directing perceived priorities in addressing it. This aligns with the theoretical principles of the agenda-setting theory and the discursive approach to policy-making.

However, while this research indicates the potential impacts of these discourses, it did not measure their direct influence on policy-making, suggesting a future research avenue. Other recommendations for further studies include extending the media scope, exploring subframes, incorporating public opinion and policy analysis, continuing temporal monitoring, and undertaking comparative studies in different national contexts.

In conclusion, through the lens of framing theory and agenda-setting theory, this chapter provided significant insights into the framing of climate change in Dutch media and parliamentary debates. The findings underscore the power of discourse in shaping the understanding of and response to climate change, illuminating the complex dynamics between media discourse, public perception, and political decision-making.

# 7. Conclusion

This thesis explored the framing of climate change in Dutch media and parliamentary debates and the potential influence of these frames on policy-making. This final chapter summarises the main findings and contributions, discusses the implications of these findings, and proposes recommendations for future research.

The analysis of newspaper columns and parliamentary debates revealed three dominant frames: the Systemic Change Frame, the Industry Responsibility Frame, and the Politics Frames, with notable subframes being the Politics Frame: Political Strategies and Politics Frame: Political Inaction.

The Systemic Change Frame emphasized the need for broad institutional changes and was a common perspective in both media and political debates. Similarly, the Industry Responsibility Frame focused on the role of industries in climate change mitigation, a sentiment shared across both platforms.

However, a divergence was noted between the media and parliamentary debates. Media discourse often highlighted climate change's moral and ethical aspects and criticized political inaction. In contrast, parliamentary debates focused more on industry responsibility and political strategies, suggesting different priorities and approaches.

In discussing how these frames bear on the formation of policies, it is crucial to recognise that as these frames gain traction in societal and governmental conversations, they can mould viewpoints and establish the groundwork for policy creation. This aligns with the core concepts of theories that assert that the issues given emphasis can dictate what is brought to the forefront in policy creation, as well as the perspective that policies are sculpted through conversation and debate.

This investigation augments the comprehension of the climate change dialogue, with a special lens on the context within the Netherlands. It illustrates the power of framing in shaping public perception and policy responses to climate change. This study reveals a complex interplay between media discourse, public perception, and policy-making by comparing media and parliamentary debates.

The identified frames could influence policy-making by directing the perceived priorities in addressing climate change. This finding suggests that understanding these frames

is crucial for stakeholders, as they navigate the complexities of climate change discourse to develop effective policy responses.

While this study provides valuable insights, it also presents several avenues for future exploration. A crucial next step is to measure the direct influence of these frames on policy-making. Additionally, future research should extend the media scope, delve deeper into subframes, and incorporate public opinion and policy analysis. A comparative study in different national contexts would also add further depth to this research area.

To conclude, the way climate change is portrayed and how that impacts the formation of policies is a multifaceted process, tightly linked with societal, political, and media dialogues. This investigation has illuminated these interactions, specifically in the Netherlands, laying the groundwork for additional studies and enhancing the comprehension of strategies, interpretations, and ultimate solutions to the pressing matter of climate change.

#### References

- Anderson, A. (1997). Media, culture, and the environment. Rutgers University Press.
- Antilla, L. (2005). Climate of scepticism: US newspaper coverage of the science of climate change. *Global Environmental Change*, 15(4), 338–352. https://doi.org/10.1016/j.gloenvcha.2005.08.003
- Bakker, P., & Vasterman, P. (2007). The Dutch media landscape. *European Media Governance: National and Regional Dimensions*, 1, 145.
- Billett, S. (2010). Dividing climate change: Global warming in the Indian mass media. *Climatic Change*, 99(1–2), 1–16. https://doi.org/10.1007/s10584-009-9605-3
- Blue, G. (2016). Framing climate change for public deliberation: What role for interpretive social sciences and humanities? *Journal of Environmental Policy & Planning*, 18(1), 67–84.
- Boykoff, M. T. (2007). From convergence to contention: United States mass media representations of anthropogenic climate change science. *Transactions of the Institute of British Geographers*, 32(4), 477–489. https://doi.org/10.1111/j.1475-5661.2007.00270.x
- Cacciatore, M. A., Scheufele, D. A., & Iyengar, S. (2016). The end of framing as we know it... and the future of media effects. *Mass Communication and Society*, 19(1), 7–23.
- Chetty, K., Devadas, V., & Fleming, J. (2015a). The framing of climate change in New Zealand newspapers from June 2009 to June 2010. *Journal of the Royal Society of New Zealand*, 45(1), 1–20. https://doi.org/10.1080/03036758.2014.996234

- Chetty, K., Devadas, V., & Fleming, J. (2015b). The framing of climate change in New Zealand newspapers from June 2009 to June 2010. *Journal of the Royal Society of New Zealand*, 45(1), 1–20. https://doi.org/10.1080/03036758.2014.996234
- Dirikx, A., & Gelders, D. (2010). To frame is to explain: A deductive frame-analysis of Dutch and French climate change coverage during the annual UN Conferences of the Parties.

  Public Understanding of Science, 19(6), 732–742.
- Dotson, D. M., Jacobson, S. K., Kaid, L. L., & Carlton, J. S. (2012). Media coverage of climate change in Chile: A content analysis of conservative and liberal newspapers. *Environmental Communication: A Journal of Nature and Culture*, 6(1), 64–81.
- Durnova, A., Fischer, F., & Zittoun, P. (2016). Discursive Approaches to Public Policy: Politics, Argumentation, and Deliberation. In B. G. Peters & P. Zittoun (Eds.), Contemporary Approaches to Public Policy (pp. 35–56). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-50494-4\_3
- Ellen Good, J. (2008). The framing of climate change in Canadian, American, and international newspapers: A media propaganda model analysis. *Canadian Journal of Communication*, 33(2), 233–256.
- Entman, R. M. (1993). Framing: Towards clarification of a fractured paradigm. *McQuail's Reader in Mass Communication Theory*, 390–397.
- Ford, J. D., & King, D. (2015). Coverage and framing of climate change adaptation in the media: A review of influential North American newspapers during 1993–2013.
  Environmental Science & Policy, 48, 137–146.
  https://doi.org/10.1016/j.envsci.2014.12.003

- Gkiouzepas, G., & Botetzagias, I. (2017a). Climate change coverage in Greek newspapers: 2001–2008. *Environmental Communication*, 11(4), 490–514.
- Gkiouzepas, G., & Botetzagias, I. (2017b). Climate Change Coverage in Greek Newspapers: 2001–2008. *Environmental Communication*, 11(4), 490–514. https://doi.org/10.1080/17524032.2015.1047888
- Han, J., Sun, S., & Lu, Y. (2017). Framing climate change: A content analysis of Chinese mainstream newspapers from 2005 to 2015. *International Journal of Communication*, 11, 23.
- Harvey, F. (2023, March 20). Scientists deliver 'final warning' on climate crisis: Act now or it's too late. *The Guardian*. https://www.theguardian.com/environment/2023/mar/20/ipcc-climate-crisis-report-delivers-final-warning-on-15c
- Hsieh, H.-F., & Shannon, S. E. (2005). Three Approaches to Qualitative Content Analysis.

  \*\*Qualitative Health Research\*, 15(9), 1277–1288.

  https://doi.org/10.1177/1049732305276687
- Iyengar, S. (1994). *Is anyone responsible?: How television frames political issues*. University of Chicago Press.
- Koopmans, R., & Statham, P. (2010). *The making of a European public sphere: Media discourse and political contention*. Cambridge University Press.
- Leruth, B., Kutiyski, Y., Krouwel, A., & Startin, N. J. (2017). Does the Information Source Matter? Newspaper Readership, Political Preferences and Attitudes Towards the EU in the UK, France and the Netherlands. In M. Caiani & S. Guerra (Eds.), *Euroscepticism*,

- *Democracy and the Media* (pp. 95–120). Palgrave Macmillan UK. https://doi.org/10.1057/978-1-137-59643-7\_5
- louanna. (2019, March 26). In face of rising sea levels the Netherlands 'must consider controlled withdrawal'. *Vrij Nederland*. https://www.vn.nl/rising-sea-levels-netherlands/
- Lune, H., & Berg, B. L. (2017). *Qualitative research methods for the social sciences*. Pearson London, UK:
- Maxwell, M. (2004). Setting the agenda: The mass media and public opinion.
- McCombs, M. E., & Shaw, D. L. (1972). The Agenda-Setting Function Of Mass Media. *Public Opinion Quarterly*, 36(2), 176–187. https://doi.org/10.1086/267990
- Medrano, J. D., Gray, E., & Gray, E. (2010). Framing the European Union in national public spheres. *The Making of a European Public Sphere. Media Discourse and Political Contention*, 195–219.
- Nisbet, M. C. (2010). Knowledge into action: Framing the debates over climate change and poverty. In *Doing news framing analysis* (pp. 59–99). Routledge.
- Olausson, U. (2009). Global warming—global responsibility? Media frames of collective action and scientific certainty. *Public Understanding of Science*, *18*(4), 421–436. https://doi.org/10.1177/0963662507081242
- Pellizzoni, L. (2004). Responsibility and environmental governance. *Environmental Politics*, 13(3), 541–565.
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49(1), 103–122.

- Schuck, & de Vreese. (2006). Between Risk and Opportunity: News Framing and its Effects on Public Support for EU Enlargement. *European Journal of Communication*, 21(1), 5–32. https://doi.org/10.1177/0267323106060987
- Shehata, A., & Hopmann, D. N. (2012). Framing Climate Change. *Journalism Studies*, *13*(2), 175–192. https://doi.org/10.1080/1461670X.2011.646396

# **Annex 1: Newspaper column list (November 2022)**

	Newspaper	Author	Date published	Title	Section	Length in words	File
1	NRC Handelsblad	Commentaar	22-11-2022	Schadefonds is een goede stap, maar lost veel te weinig op	Opinie	589	NRC_1
2	NRC Handelsblad	Commentaar	02-11-2022	De Aarde is net zo heilig als het Meisje met de Parel	Opinie	583	NRC_2
3	NRC Handelsblad	Commentaar	12-11-2022	Betalen voor klimaatschade is geen liefdadigheid, maar welbegrepen eigenbelang	Opinie	806	NRC_3
4	NRC Handelsblad	Aylin Bilic	10-11-2022	Dogmatici belemmeren radicale klimaataanpak	Column	802	NRC_4
5	NRC Handelsblad	Marijn Kruk	07-11-2022	Met klimaatrouw kun je twee kanten op	Column	668	NRC_5
6	NRC Handelsblad	Commentaar	07-11-2022	De tijd van de geitenpaadjes moet nu echt voorbij zijn	Opinie	607	NRC_6
7	NRC Handelsblad	Luuk van Middelaar	23-11-2022	Amerikaans economisch egoïsme behoeft antwoord	Opinie	814	NRC-7
8	NRC Handelsblad	Rosanne Hertzberger	12-11-2022	De klimaatkolder van gladde ceo's	Column	728	NRC_8
9	Algemeen Dagblad	Saskia van Westhreenen	21-11-2022	Met deze aflaat gaan we de wereld niet redden	Opinie	377	AD_1
10	Algemeen Dagblad	Hans van Soest	03-11-2022	Politiek is onmachtig in bouwcrisis	Opinie	379	AD_2

11	Algemeen Dagblad	Hans Nijenhuis	1-11-2022	Ook voor ons is Lula beter	Opinie	406	AD_3
12	Telegraaf	Nausicaa Marbe	11-11-2022	In Egypte verklaarde Rutte ons schuldig	Opinie	892	Telegraaf_1
13	Telegraaf	Leon de Winter	01-11-2022	Niet de burger maar het klimaat als prioriteit	Opinie	909	Telegraaf_2
14	Telegraaf	Leon de Winter	29-11-2022	'Klimaatbeheersing' vervangt burger; ik werd een niet-begrijper	Opinie	878	Telegraaf_3
15	Telegraaf	Hoofdredactie	21-11-2022	Bij naderende recessie hoeven we niet op de overheid te rekenen	Opinie	235	Telegraaf_4
16	Telegraaf	Ronald Plasterk	24-11-2022	Links maakt de verkeerde keuzes	Opinie	893	Telegraaf_5
17	Telegraaf	Leon de Winter	22-11-2022	Met digitaal geld bevolking reguleren	Opinie	858	Telegraaf_6
18	Telegraaf	Ronald Plasterk	03-11-2022	Echte doel activisten is niet het klimaat	Opinie	828	Telegraaf_7
19	Telegraaf	Marianne Zwagerman	11-11-2022	Permanente crisis: domheid of kwaadaardigheid?	Opinie	586	Telegraaf_8
20	Volkskrant	Sander Schimmelpenninck	14-11-2022	Het hypocrisieverwijt is uitsluitend bedoeld om klimaatbeleid te saboteren	Ten Eerste	652	Volkskrant_1
21	Volkskrant	Teun van de Keuken	14-11-2022	Beter een inconsequente idealist dan een cynische zak	Ten Eerste	573	Volkskrant_2
22	Volkskrant	Merel van Vroonhoven	12-11-2022	Zelfs het vooruitzicht van het einde der tijden verandert ons gedrag niet	Ten Eerste	616	Volkskrant_3
23	Volkskrant	Fleur Jongepier	12-11-2022	Het komt Rutte goed uit om bepaalde discussies 'gevoelig' te noemen	Zaterdag	647	Volkskrant_4
24	Volkskrant	Pieter Klok	19-11-2022	Invoelbaar	Zaterdag	406	Volkskrant 5
25	Volkskrant	Volkskrant- commentaar	21-11-2022	Het schadefonds van Sharm El-Sheikh is een doorbraak, maar ook een capitulatie	Ten Eerste	482	Volkskrant_6
26	Volkskrant	Volkskrant- Commentaar	8-11-2022	Als rijke landen geen verantwoordelijkheid willen nemen, dan is klimaatcompensatie de enige weg	Ten Eerste	466	Volkskrant_7
27	Trouw	Commentaar	23-11-2022	Klimaatcrisis onstijgt de politiek	Opinie	449	Trouw_1
28	Trouw	Commentaar	9-11-2022	Politici moeten meer dan hun best doen	Opinie	420	Trouw_2

29	Trouw	Commentaar	19-11-2022	8 miljard mensen, op dit kleine stukje aarde	Opinie	465	Trouw_3
30	Trouw	Irene van Staveren	29-11-2022	Kwaad word ik van de olie- en gaslobby	Opinie	546	Trouw_4
31	Trouw	Rob de Wijk	4-11-2022	Blijf uitleggen waarom gas duur is	Opinie	572	Trouw_5
32	Trouw	Rob de Wijk	25-11-2022	We hebben'foute' landen nog wel nodig	Opinie	570	Trouw_6
33	Trouw	Monic Slingerland	19-11-2022	Moet Nederland klimaatschade elders	Opinie	481	Trouw_7
				compenseren, ten koste van onszeld?			

# **Annex 2: Newspaper column list (November 2021)**

	Newspaper	Author	Date published	Title	Section	Length in words	File
34	NRC Handelsblad	Commentaar	15-11-2021	Teleurstelling over Glasgow is terecht, maar verlies geen tijd; Commentaar	Opinie	619	NRC_9
35	NRC Handelsblad	Commentaar	10-11-2021	Nederland moet klimaatverandering met daden bestrijden; Commentaar	Opinie	607	NRC_10
36	NRC Handelsblad	Kiza Magendane	12-11-2021	De vieze nasmaak van geboortebeperking; column	Opinie	801	NRC_11
37	NRC Handelsblad	Maarten Schinkel	4-11-2021	Klimaatplannen zat – nu de financiering nog; Column	Economie	640	NRC_12
38	NRC Handelsblad	Marike Stellinga	13-11-2021	Breng klimaat naar hart van economie; Column	Economie	591	NRC_13
39	NRC Handelsblad	Menno Tamminga	2-11-2021	Renteniersmentaliteit nekt klimaatpolitiek; Column	Economie	599	NRC_14
40	NRC Handelsblad	Louise O. Fresco	15-11-2021	Klimaat: de mens past bescheidenheid; Column	Opinie	641	NRC_15

41	Algemeen	Sjaak Bral	16-11-2021	Shell vertrekt nu omdat het ze te financieel	Column	414	Telegraaf_13
	Dagblad			te heet onder de voeten wordt			
42	Telegraaf	Leon de Winter	02-11-2021	Klimaatverandering behoort tot de	Opinie	878	Telegraaf_14
				tijdloze feiten van onze planeet			
43	Telegraaf	Wouter de	01-11-2021	Draagvlak sluitpost van klimaatbeleid	Opinie	831	Telegraaf_15
		Winther					
44	Telegraaf	Afshin Ellian	8-11-2021	Klimaatgeloof dreigt te eindigen in	Opinie	799	Telegraaf_16
				tirannie en irrationaliteit			
45	Telegraaf	Rob Hoogland	1-11-2021	Een paradijs dat er nooit zal komen	Opinie	481	Volkskrant_8
46	Telegraaf	Leon de Winter	30-11-2021	Aan elke lockdown komt er een einde en	Opinie	849	Telegraaf 13
				dan neemt de verspreiding van de ziekte			
				weer toe			
47	Telegraaf	Casper Burgering	1-11-2021	Agrarische C02-reductie reikt verder dan	Opinie	598	Telegraaf 14
				alleen het boerenerf			
48	Telegraaf	Ronald Plasterk	25-11-2021	Timmersmans spreekt altijd smalend over	Opinie	857	Telegraaf_15
				kernenergie	1		
49	Telegraaf	Ronald Plasterk	4-11-2021	Wie tegen kernenergie is, laat het	Opinie	873	Telegraaf_16
				klimaatprobleem bestaan			
50	Volkskrant	Volkskrant-	15-11-2021	Klimaattop stelt teleur, ondanks	Ten	384	Volkskrant 8
		Commentaar		toenadering tussen VS en China	Eerste		_
51	Volkskrant	Volkskrant-	12-11-2021	De vraag is niet of we kernenergie willen,	Ten	395	Volkskrant 9
		Commentaar		maar of we nog zonder kunnen	Eerste		_
52	Volkskrant	Volkskrant-	19-11-2021	Timmermans mag nog wel een tandje	Ten	403	Volkskrant 10
		Commentaar		bijzetten in zijn ambitie tot duurzaamheid	Eerste		_
53	Volkskrant	Wim Bossema	10-11-2021	Braziliaanse en Indiase media	Opinie en	961	Volkskrant 11
				verwonderen zich om onoverwachte	Debat		_
				ommezwaai taaie klimaatdwarsliggers			
54	Volkskrant	A\sha ten Broeke	12-11-2021	Van wie is de aarde? In ieder geval niet	Opinie en	758	Volkskrant_12
				alleen van de mensen, wij zijn slechts een	Debat		
				van de vele diersoorten			
				van de vete diersoorten			

55	Volkskrant	Sheila Sitalsing	11-11-2021	Alle bedrijven zijn voor duurzaamheid,	Ten	578	Volkskrant_13
				maar moet dat echt nu?	Eerste		
56	Trouw	Commentaar	16-11-2021	Trek lessen uit het mislukken van de	Opinie	479	Trouw_8
				klimaattop			
57	Trouw	Commentaar	23-11-2021	Hoogste tijd voor een missionair kabinet	Opinie	444	Trouw_9
58	Trouw	Ilyaz Nasrullah	04-11-2021	Een deepfake om flink van te schrikkken	Opinie	591	Trouw_10
59	Trouw	Irene van Staveren	16-11-2021	Nederland, doe ook gas en olie in de ban	Opinie	546	Trouw_11
60	Trouw	Rob de Wijk	05-11-2021	Wat de Britse vorstin zo moedeloos maakt	Opinie	570	Trouw_12
61	Trouw	Commentaar	06-11-2021	Wat is Ruttes groene ambitie waard?	Opinie	483	Trouw_13

## **Annex 3: Newspaper column list (December 2019)**

	Newspaper	Author	Date	Title	Section	Length in	File
			published			words	
62	NRC	Commentaar	18-12-2019	Een mislukking die de aarde erniet bij kan	Opinie	623	NRC 16
	Handelsblad			hebben; Commentaar	-		_
63	NRC	Luuk van	20-12-2019	Pas op voorrevolutie van groene garde;	Opinie	639	NRC_17
	Handelsblad	Middelaar		Column			
64	NRC	Zihni Özdil	14-12-2019	Greta Turnberg laat ons morele failliet	Opinie	676	NRC_18
	Handelsblad			zien; Column			
65	NRC	Louise O. Fresco	02-12-2019	Venetië, canvas voor hedendaagse zorgen;	Opinie	642	NRC_19
	Handelsblad			Column			
66	NRC	Commentaar	12-12-2019	Klimaatplannen van Europa tonen aan	Opinie	618	NRC_20
	Handelsblad			dat het nu menens is; Commentaar			_
67	NRC	Zihni Özdil	21-12-2019	Open brief aan Shell Column	Opinie	575	NRC_21
	Handelsblad						_

68	NRC	Marike Stellinga	14-12-2019	Pas op voor het grote groene plan;	Economie	600	NRC_22
	Handelsblad			Column			
69	Algemeen	Phaedra	07-12-2019	Het enige dat een trekker stopt, is een tank	Column	415	AD_5
	Dagblad	Werkhoven					
70	Volkskrant	Ben van Raaij	31-12-2019	Groene toekomst	Opinie en	615	Volkskrant_14
					Debat		
71	Volkskrant	Peter Giesen	24-12-2019	Klimaatdiscussie	Opinie en	594	Volkskrant_15
					Debat		
72	Volkskrant	Peter Giesen	16-12-2019	Klimaatneutraal	Opinie en	399	Volkskrant 16
					Debat		_
73	Volkskrant	Peter Giesen	15-12-2019	Het linkse, elitaire klimaatframe is	Opinie	382	Volkskrant_17
				onzinnig			
74	Trouw	Commentaar	17-12-2019	Lichtpuntje aan het klimaatfront	Opinie	458	Trouw_14

### **Annex 4: Debate list**

#### List of debates which have been used in this research

	Date	Title	Length in pages	File
1	30-11-2022	Debat over de Klimaat- en Energieverkenning en de Klimaatnota		Debat-1A
			34	Debat-1B
2	2-11-2021	Begroting Economische Zaken en Klimaat 2022	47	Debat-2A
	4-11-2021	Afronding behandeling begroting Economische Zaken en Klimaat	29	Debat-2B
3	17-12-2019	Debat over de Klimaat- en Energieverkenning 2019	40	Debat-3
			Total: 178	

Annex 5: Initial codebook based on Chetty et al. (2015), Nisbet (2010), and Blue (2015).

	Frame	<b>Operational Definitions</b>	<b>Example Coding Questions</b>	Examples
1	Social Progress Frame (Chetty et al., 2015)	Emphasis on actions, efforts, and solutions that contribute to a sustainable future, individual responsibility, and adaptation to climate change.	Are individual or collective actions towards a	•
2	Morality Frame (Chetty et al., 2015)	Presentation of climate change and efforts to mitigate it as a moral or ethical issue.	Is climate change presented as a moral or ethical issue?  Does the content discuss responsibilities towards future generations or less developed nations?	"We owe it to future generations to curb emissions", "Developed nations have a duty to assist less developed ones in the climate crisis"
3	Politics Frame (Chetty et al., 2015)	Coverage of political actions, inaction, or strategies related to climate change.		"Government unveils new climate policy", "Politician X criticized for inaction on climate change", "Conflict between Party A and Party B over climate policy"

4	Scientific
	Controversy
	Frame (Chet
	et al., 2015)

particularly among scientific or "scientists vs. skeptics"? expert communities.

Framing of climate change as a Is there discussion of a disagreement or debate over "Scientist A disputes climate change claims made by subject of dispute or controversy, climate change? Does the content frame the issue as Scientist B...", "Climate skeptics question latest IPCC

report..."

## (Chetty et al., 2015)

scientific or technical issue, or a matter of expert knowledge.

unknown about climate change, based on scientific impacts of climate change..." knowledge?

5 Science Frame Presentation of climate change as a Does the content highlight new research related to "New study finds evidence of accelerating sea level climate change? Does it focus on what is known and rise...", "What we know and don't know about the

#### **6** Economic Competitivenes Frame (Chetty et al., 2015)

impacts or implications of actions taken to mitigate climate change.

Discussion of the economic Does the content discuss the economic implications of "Carbon tax could spur innovation, boost economy...", solutions to climate change? Are potential economic benefits or harms highlighted?

"Action on climate change threatens agricultural sector..."

Catastrophic Impact Frame (Nisbet, 2010; Blue, 2015)

potentially catastrophic environmental consequences of climate change, often employing visually dramatic imagery and highlighting risks of crossing critical ecological thresholds. It may involve a sense of alarmism and extreme depictions of climate impacts.

catastrophic climate change impacts, such as severe weather events, species endangerment, or drastic landscape changes? 3. Does the content mention crossing critical ecological thresholds? 4. Does the content indicate that media exaggeration or overdramatization contributes to the perception of climate change?

This frame emphasizes the severe, 1. Does the content use dramatic or alarming language 1. "Dire predictions warn of a future with cities to describe the potential consequences of climate submerged due to rising sea levels..." (adapted from change? 2. Are there depictions or descriptions of Nisbet, 2010, p. 55) 2. "Graphic illustrations show polar bears struggling to survive on melting ice..." (adapted from Nisbet, 2010, p. 55) 3. "Content describes the point of no return, where human actions irreversibly damage Earth's ecosystems..." (adapted from Blue, 2015, p. 75) 4. "Media report emphasizes catastrophic consequences, claiming it to be 'the most terrifying problem you will ever face..." (adapted from Nisbet, 2010, p. 55)

Sustainable Economic Opportunity Frame (Nisbet, 2010)

chance for economic growth through innovative energy technologies and sustainable practices. It underlines the potential for job creation, green energy solutions, and market opportunities.

Reframes climate change as a Does the content present climate change actions as economic opportunities? Are job growth and market opportunities associated with innovative energy technologies highlighted? Is there discussion about "green jobs" or "sustainable economic prosperity"?

"Innovative energy technologies could lead to job growth...", "Green jobs playing a crucial role in economic recovery...", "New market opportunities arise from climate action..." (Adapted from Nisbet, 2010)

Scientific Integrity Accountability Frame (Adapted from Nisbet, 2010)

with scientific consensus or like climate change. This frame suggests that certain political entities may manipulate, dismiss, or downplay scientific findings for ideological or political purposes.

thereof in maintaining scientific integrity? Does it research, particularly on issues portray a perceived 'war on science'?

Highlights conflicts and tensions Does the content discuss instances where politics "Politician X dismisses latest climate research...", where political interests are appear to interfere with scientific research or "Calls for accountability as evidence of political perceived to supersede or interfere consensus? Does it highlight accountability or lack interference in climate science emerges...", "The ongoing 'war on science': how climate research is undermined by political interests..."

- 1 Scientific
- Controversy and Economic Risk Frame

existence of scientific controversy with or disagreement surrounding climate change while highlighting potential economic

- frame emphasizes the 1. Does the content present climate change as a topic 1. "Climate action policies could have dire economic significant scientific controversy
  - or implications, especially if international cooperation is disagreement? 2. Does the content emphasize potential lacking" (Adapted from Nisbet, 2010, p. 54). 2. "There economic risks or negative consequences of is ongoing scientific debate regarding the causes and addressing climate change? 3. Does the content argue impacts of climate change" (Adapted from Nisbet,

(Adapted from Nisbet, 2010)

addressing climate change may negative consequences or burdens, particularly if other nations do not participate in international agreements.

associated with taking action to that addressing climate change could place an 2010, p. 54). 3. "Some argue that the resources economic content use selective evidence to portray scientific disagreement or controversy regarding climate change?

address it. It suggests that economic burden on a nation, especially if other allocated to combat climate change should be countries do not take similar actions? 4. Does the redirected towards other pressing issues, given the potential economic risks involved" (Adapted from Nisbet, 2010, p. 54). 4. "While proponents of climate action emphasize the need for swift response, critics point to scientific uncertainty and potential economic burdens" (Adapted from Nisbet, 2010, p. 54).

# Annex 6: Hybrid codebook derived from the works of Chetty et al. (2015), Nisbet (2010), Blue (2015), Dutch House of Representative Debates, and Dutch newspaper columns

	Frame	<b>Operational Definitions</b>	<b>Example Coding Questions</b>	Examples
1	Industry Responsibility Frame	Emphasizes the role of industries and corporations in mitigating climate change through sustainable practices and innovation	Does the content discuss the responsibilities and roles of industries in climate change? Are specific industry-related solutions or innovations highlighted?	"Follow the Money heeft gisteren laten zien dat zelfs zogenaamd groene fondsen nog steeds investeren in de fossiele industrie en in de luchtvaart." (Translation: "Follow the Money showed yesterday that even so-called green funds are still investing in the fossil industry and in aviation.") (Teunissen, Debate-1)  "geen fossiele investeringen, geen fossiele reclames. Stop met subsidies aan grote vervuilers" (Translation: "no fossil investments, no fossil advertisements. Stop subsidies to big polluters.") (Teunissen, Debate-1)  "Erken nu eindelijk dat het nodig is om veel minder dieren in de veehouderij te hebben om de natuur te redden en om de klimaatdoelen te halen." (Translation: "Finally acknowledge that we need to have far fewer animals in livestock farming to save nature and achieve the climate
				goals.") (Teunissen, Debate-1)
2	Consumer Behaviour Frame	Focuses on the role of individual and collective actions in promoting a sustainable future	Does the content discuss changes in consumer habits or lifestyle choices related to climate change? Are	"we moeten minder vliegen, minder autorijden en veel meer investeren in het openbaar vervoer."

			future emphasized?	invest much more in public transportation.") (Teunissen, Debate-1)
3	Systemic Change Frame	Highlights the need for systemic, institutional changes to combat climate change, including policy changes and large-scale adaptations	Does the content discuss systemic changes needed to address climate change? Are policy changes or large-scale adaptation strategies discussed?	"Het klimaatbeleid moet niet alleen beter; er moet ook een fundamentele systeemverandering komen." (Translation: "Climate policy not only needs to be better; there also needs to be a fundamental system change.") (Teunissen, Debate-1)  "Om de CO2-reductiedoelen (en liefst natuurlijk
				meer) te halen in 2030 en 2050 hebben we radicale maatregelen nodig." (Translation: "In order to achieve the CO2 reduction goals (and preferably of course more) by 2030 and 2050, we need radical measures.") (NRC-4)
	Morality Frame (Chetty et al., 2015)	Presentation of climate change and efforts to mitigate it as a moral or ethical issue.	Is climate change presented as a moral or ethical issue? Does the content discuss responsibilities towards future generations or less developed nations?	"Bijna twee decennia zijn de welvarende landen een discussie over verantwoordelijkheid uit de weg gegaan" (Translation: "For nearly two decades, the prosperous countries have avoided discussing responsibility"). (NRC-3)
				"Voorzitter. Nederland heeft de plicht om een zo veilig en rechtvaardig mogelijke bijdrage te leveren aan het beperken van de opwarming van de aarde tot 1,5 graad" (Translation: "Chair. The Netherlands has a duty to make the safest and fairest possible contribution to limiting global

individual or collective actions towards a sustainable

(Translation: "we need to fly less, drive less and

warming to 1.5 degrees). (Teunissen, Debat-1)

5	Politics Frame (Chetty et al., 2015)	Coverage of political actions, inaction, or strategies related to climate change.	Does the content focus on what politicians are doing or should be doing about climate change? Does it position climate change as a subject of political strategy or conflict?	"Government unveils new climate policy", "Politician X criticized for inaction on climate change", "Conflict between Party A and Party B over climate policy"
		3.1 Political Strategies: Highlights the strategic approaches adopted by political actors to tackle climate change.	- Does the content discuss the strategies employed by political actors in addressing climate change? - Are there mentions of international agreements or diplomatic efforts?	"Waarom zetten we niet in op directe conversie van wind op zee naar waterstof?" (Debate-1)
				"Een schadefonds gaat deze ronduit zorgelijke dynamiek niet temperen. Wat nodig is zijn snellere, daadwerkelijke emissiereducties"
		3.2 Political Conflict: Focuses on conflicts, disagreements, or debates within the political arena regarding climate change.	- Does the content highlight disagreements or debates among political actors regarding climate change? - Are there clashes between different political parties or ideologies on climate policy?	"Bijna twee decennia zijn de welvarende landen een discussie over verantwoordelijkheid uit de weg gegaan"
				"Laten we de discussie over de hele klimaatobsessie, die obsessie met de verandering van het klimaat, maar niet eens voeren"
		3.3 Political Inaction: Examines instances where political actors are criticized or scrutinized for their lack of action or inadequate response to climate change	- Does the content discuss cases where political actors are accused of inaction on climate change? - Are there instances where politicians are criticized for their delayed response or negligence?	"Er zijn nog steeds klimaattaboes: maatregelen die haalbaar en effectief zijn, maar die niet worden ingevoerd door een gebrek aan politieke wil, terwijl de grote vervuilers worden ontzien."
				"Is de minister het met BVNL eens dat de effectiviteit van het beleid moeilijk meetbaar is?"
6	Scientific Controversy	Framing of climate change as a subject of dispute or controversy,	Is there discussion of a disagreement or debate over climate change? Does the content frame the issue as "scientists vs. skeptics"?	"Maar gelukkig laten de feiten iets anders zien. Kan de minister bevestigen dat de zeespiegel in

	Frame (Chetty et al., 2015)	particularly among scientific or expert communities.		de Noordzee ieder jaar met 2 millimeter stijgt en dat deze stijging lineair is?"
7	Science Frame (Chetty et al., 2015)	Presentation of climate change as a scientific or technical issue, or a matter of expert knowledge.	Does the content highlight new research related to climate change? Does it focus on what is known and unknown about climate change, based on scientific knowledge?	"Wetenschappers waarschuwen dat het moment naderbij komt dat het tropisch vochtige klimaat omslaat naar een droog klimaat". "Dat zou niet zo zijn als Nederland, net als klimaatweten- schappers, uit zou gaan van een koolstofbudget"
8	Economic Competitivene ss Frame (Adapted from Chetty et al., 2015)	Discussion of the economic impacts or implications of actions taken to mitigate climate change.	Does the content discuss the economic implications of solutions to climate change? Are potential economic benefits or harms highlighted? Does the content discuss perceived financial imbalances or unfairness related to actions taken to mitigate climate change? Are there mentions of some countries or groups bearing a disproportionate financial burden?	"Verscherpte reductiedoelstellingen kunnen economisch pijn doen, maar onderzoek heeft ook al vaak aangetoond dat niets doen tot veel hogere kosten leidt"  "Waarom zetten we niet in op directe conversie van wind op zee naar waterstof? Dit is goedkoper, we creëren een markt en daarmee hebben we een energiebuffer in plaats van wiebelstroom"
9	Catastrophic Impact Frame (Nisbet, 2010; Blue, 2015)	This frame emphasizes the severe, potentially catastrophic environmental consequences of climate change, often employing visually dramatic imagery and highlighting risks of crossing	1. Does the content use dramatic or alarming language to describe the potential consequences of climate change? 2. Are there depictions or descriptions of catastrophic climate change impacts, such as severe weather events, species endangerment, or drastic landscape changes? 3. Does the content mention	"Klimaatverandering is een urgent probleem dat in de trits van alle andere acute crises - inflatie, stijgende energiekosten, oorlog - op de achtergrond dreigt te raken, terwijl het de allergrootste crisis is".

critical ecological thresholds. It may involve a sense of alarmism and extreme depictions of climate impacts. crossing critical ecological thresholds? 4. Does the content indicate that media exaggeration or overdramatization contributes to the perception of climate change?

"hoe moeilijk voorstelbaar de catastrofale gevolgen van het niet aanpakken van het klimaatprobleem wellicht ook zijn. Niets doen is geen optie"

"Al bijna dertig jaar wordt erop aangedrongen door kwetsbare landen: de erkenning dat klimaatverandering ernstige schade veroorzaakt en in de toekomst nog veel meer schade gaat veroorzaken"

10 Sustainable Economic Opportunity Frame (Nisbet, 2010) Reframes climate change as a chance for economic growth through innovative energy technologies and sustainable practices. It underlines the potential for job creation, green energy solutions, and market opportunities.

Does the content present climate change actions as economic opportunities? Are job growth and market opportunities associated with innovative energy technologies highlighted? Is there discussion about "green jobs" or "sustainable economic prosperity"?

"BVNL is groot voorstander van kernenergie. Daarnaast moeten we inzetten op Nederland als waterstof- land in plaats van miljarden te verspillen aan CCS." (van Haga) 1

"De verduurzaming van de industrie kent veel drempels. Het is vaak te duur om groen te produceren en er kan twijfel bestaan over de vraag of er inderdaad ook een afzetmarkt is. Dat kan anders, want het Zweedse H2 Green Steel is van plan om in 2025 groen staal te produce- ren. In aanloop daarnaartoe hebben zij zelf alle ketenpartijen betrokken, inclusief afnemers zoals automerken BMW of Mercedes-Benz, om risico's en voordelen te verdelen. Dit creëert een voorspelbare groeiende groene afzetmarkt en

daarmee een businesscase voor investeerders "
(Dassen)

The speaker is emphasizing the economic opportunities that come with a shift to greener industry practices, specifically in the context of creating a market for green products and attracting investors

11 Scientific
Integrity and
Accountability
Frame
(Adapted from
Nisbet, 2010)

Highlights conflicts and tensions where political interests are perceived to supersede or interfere with scientific consensus or research, particularly on issues like climate change. This frame suggests that certain political entities may manipulate, dismiss, or downplay scientific findings for ideological or political purposes.

Does the content discuss instances where politics appear to interfere with scientific research or consensus? Does it highlight accountability or lack thereof in maintaining scientific integrity? Does it portray a perceived 'war on science'?

"Is de minister het met BVNL eens dat de effectiviteit van het beleid moeilijk meetbaar is?"

12 Scientific Controversy and Economic Risk Frame (Adapted from Nisbet, 2010) This frame emphasizes the existence of scientific controversy or disagreement surrounding climate change while highlighting potential economic risks associated with taking action to address it. It suggests that addressing climate change may lead to negative economic consequences or burdens, particularly if other nations do not

- 1. Does the content present climate change as a topic with significant scientific controversy or disagreement?
- 2. Does the content emphasize potential economic risks or negative consequences of addressing climate change?
- 3. Does the content argue that addressing climate change could place an economic burden on a nation, especially if other countries do not take similar actions? 4. Does the content use selective evidence to portray scientific disagreement or controversy regarding climate change?
- 1. "Climate action policies could have dire economic implications, especially if international cooperation is lacking" (Adapted from Nisbet, 2010, p. 54). 2. "There is ongoing scientific debate regarding the causes and impacts of climate change" (Adapted from Nisbet, 2010, p. 54). 3. "Some argue that the resources allocated to combat climate change should be redirected towards other pressing issues, given the potential economic risks involved" (Adapted from Nisbet,

		participate in international agreements.		2010, p. 54). 4. "While proponents of climate action emphasize the need for swift response, critics point to scientific uncertainty and potential economic burdens" (Adapted from Nisbet, 2010, p. 54).
13	Elitism or Class Conflict Frame	Presents climate change policies and discussions as dictated by an elite group (often characterized as out of touch or indulgent), which potentially disregard or impose burdens on 'ordinary' individuals or the wider public	Does the content portray climate change policies as being dictated by an elite group? Is there a depiction of these elites as being out of touch with the realities of ordinary citizens? Are the impacts of climate policies on 'ordinary' people highlighted?	"Lekker met z'n allen in privéjets ernaartoe om daar met andere klimaatfetisjisten te bepalen wat gewone mensen allemaal wel en niet mogen doen." ("Nicely together in private jets to determine with other climate fetishists what ordinary people can and cannot do") demonstrates this frame, as it contrasts the perceived indulgence of the 'climate fetishists' with the restrictions placed on 'ordinary people'. Similarly, the phrase "We mogen geen CO2 meer uitstoten en we mogen geen vlees meer eten" ("We are not allowed to emit CO2 anymore and we are not allowed to eat meat anymore") depicts the perceived burdens imposed by the elites' climate policies on the ordinary public. (Van Haga, Klimaat-en Energieverkenning en de Klimaatnota)
14	National Responsibility vs Global Impact	This frame highlights the stark contrast between a nation's responsibility for a small portion of global CO2 emissions versus the comprehensive global impact of climate change. It underscores the need for global efforts to combat climate change, rather than focusing solely on the contributions	Does the content emphasize the small proportion of CO2 emissions produced by a single nation compared to the global total?  Does the content argue for a global approach to tackling climate change rather than focusing on national actions?  Does the content suggest that national efforts to reduce CO2 emissions are insufficient or futile in the face of global emissions?	The Netherlands contributes less than half a percent to the total global CO2 emissions, making our national efforts seem relatively insignificant (Kops, Klimaat-en Energieverkenning en de Klimaatnota)

of individual, often smaller, countries.