Climate change in Europe: An analysis of the security narratives in European Parliamentary debates

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Abstract

The European Union has been recognised as a unique international organisation in its securitisation of climate change. The organisation has successfully securitised climate change since 2008, prioritising it on the policy agenda. This securitisation has been established through speech acts defining climate change as a threat. This thesis examines the security narratives invoked in European Parliamentary debates from 2005 to 2011, focusing on the different security framings of climate change as a threat, and how these have changed over time. It argues that before the securitisation of climate change, the European Parliament framed climate change predominantly through 'low politics' security narratives like cooperative, environmental, and human security framings. Remarkably, this did not change after the securitisation of climate change, while it was expected that 'high politics' security narratives like global and national security would be more dominant. Ultimately, this thesis shows that when addressing climate change, the European Parliament frames the issue as a threat primarily through 'low politics' narratives, both in the three years before and the three years after the successful securitisation of climate change.

Keywords: Climate change, international organisations, securitisation theory, security narratives, European Parliament

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Abbreviations

Table 1. List of abbreviations

Abbreviation	Full term
ASEAN	Association of Southeast Asian Nations
AU	African Union
COP	Conference of the Parties
EP	European Parliament
EU	European Union
IPCC	Intergovernmental Panel on Climate Change
MEP	Member of the European Parliament
NATO	North Atlantic Treaty Organisation
OAS	Organisation of American States
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

1. Introduction

In her acceptance speech in front of the European Parliament (EP) for the presidency of the European Union (EU), Ursula von der Leyen referred to climate change as an "existential issue for Europe", asking how it cannot be existential "when we see Venice under water, Portugal's forests on fire, or Lithuania's harvests cut by half, because of droughts" (von der Leyen in European Commission, 2019). The characterisation of climate change as an 'existential issue' not just for one country, but for multiple European countries illustrates how climate change is becoming an increasingly pressing issue in the contemporary world. It exemplifies the transnational nature of climate change, reaching beyond the boundaries of the modern nation-state. The issue is therefore best recognised as a global threat in need of a global solution. Because of their transnational nature, international organisations can be perceived as key actors in trying to tackle climate change.

In scholarly literature, a great deal of research has already examined international organisations, and security, and climate change. Particularly the EU has been prominent in scholarly literature. The EU has been acknowledged as a complex actor with competences in a wide range of issues relevant to security (Sperling & Webber, 2019, p. 228). It is considered unique in that it is accepted, both by its internal audience and by the international community, as a leader in tackling climate change. (Dupont, 2019, p. 383). Much research has been conducted on how the European Union got its leading role on tackling climate change internationally and how it has been able to successfully securitise the issue (Oels, 2012, p. 195; Floyd, 2015, p. 132; Dupont, 2019, pp. 369-370). Concludingly, the scholarly literature has found the European Union as a unique case in its successful securitisation of climate change.

Subsequently, scholars have proceeded to focus primarily on how the EU got this position by comparing it to other international organisations, and by examining the policy-outcomes to evaluate the effects of securitisation. However, research has not focused on the internal workings of the European Union. To this end, this thesis fills this gap by examining the different narratives used to depict climate change as a security-threat in the European Parliament.

The thesis advances research on the securitisation of climate change in relation to international organisations through its theoretical and empirical contributions. Theoretically, the thesis contributes to research on advancing securitisation theory's understanding of what security narratives are most dominant in the context of successful securitisation. This is an essential theoretical contribution, as the used security narratives are the type of speech acts used

and these speech acts form an essential basis for the securitisation process (Nyman, 2018, p. 102; Emmers, 2016, p. 171). The empirical contribution of the thesis is that it tests a theoretical linkage between security narratives of climate change in relation to the European Parliament, which has not previously been analysed.

The thesis explores the differences in security narratives on the issue of climate change between 2005 and 2011. A single case study is conducted on these narratives regarding the European Parliament. To this end, the research question posed for this thesis is: *How did the security narratives of climate change in debates in the European Parliament change from 2005 to 2011?*

The thesis will first present a review of the academic literature on climate change securitisation, relating this to the EP. Second, a theoretical framework based on securitisation theory and, more specifically, the perspective of the Copenhagen School will be presented. This will be followed up by a discussion of the research design of the thesis. Hereafter, the research section will be discussed, consisting of a content analysis of the security narratives used in debates in the EP. The thesis will end with a conclusion, and a discussion of the limitations and recommendations for future research.

2. Literature review

This section explores the scholarly literature on climate change in relation to international organisations generally, and to the European Union in particular, and scholarly discussions on the framings of security.

2.1 Climate change and international organisations

As an issue of global concern, climate change has gained substantial scholarly attention from diverse research fields, including political science, international relations, environmental science, and security studies. Yet, important gaps persist, especially in regard to security narratives on climate change within international organisations. Considerable research has already been done on how international organisations function as actors, forums, and resources (Hurd, 2013, pp. 12–13). In regard to climate change, research has shown that international organisations behave as actors in that they monitor performance, devise regulations, and consider sanctions (Biermann & Bauer, 2004, p. 189; Simmons & Martin, 2013, p. 335; Finnemore & Sikkink, 1998, p. 902). To be able to address climate change more forcefully, international organisations securitise climate change, for example by arguing that it can lead to conflicts, migration, and terrorism (Brzoska, 2009, pp. 137-138; Peters, 2018, p. 197). In short, they position climate change as a security issue (Brzoska, 2009, p. 137). Additionally, scholars have debated the relation between policy output and the securitisation of climate change. Scholars have generally concluded that when international organisations focus on their overall agenda, instead of on climate change as a distinct issue, this will lead to less effective policy outcomes (Dellmuth, Gustafsson, Bremberg, Sonnsjö & Mobjörk, 2018, p. 5; Arias, 2021, p. 29).

2.2 Climate change and the European Union

Acknowledging that climate change is increasingly problematic, actors in international relations make securitising moves to tackle the issue more effectively (Buzan, Wæver, & de Wilde, 1998, p. 21). In securitising climate change, authoritative actors articulate a logic of security, in which they discursively construct threats through speech acts and initiate policy measures in response (Dupont, 2019, p. 369; Sperling & Webber, 2019, p. 228).

A vast amount of research has focused on these securitising moves in relation to international organisations. The three organisations that receive most scholarly scrutiny are the United Nations (UN), North Atlantic Treaty Organisation (NATO), and the EU. Research revolving around the UN and climate change generally concludes that climate change has not

completely been securitised in the organisation and its organs (Peters, 2018, p. 196; Dewi, 2020, p. 168; Maertens, 2021). Research on NATO has generally concluded that the organisation has tried to securitise climate change, but that its scope has been very limited to merely protecting its military capabilities (Floyd, 2015, pp. 129-130; Dellmuth et al., 2018, p. 4).

Conversely, the European Union is recognised as a unique intergovernmental organisation regarding its securitisation of climate change. There is a consensus among scholars that the EU has successfully securitised climate change since 2008 (Oels, 2012, p. 195; Floyd, 2015, p. 132; Dupont, 2019, p. 369). This entails that the issue of climate change, including its security implications, are prioritised on the policy agenda. The publication of the Report on Climate Change and International Security in 2008 written by the High Representative for Common Foreign and Security Policy is marked as the moment where climate change became fully securitised in the EU (Floyd, 2015, p. 132). Research has found that from 2008 onwards, the policy measures adopted by the EU, and how these are adopted, are proof of a successful securitisation (Dupont, 2019, p. 370). On all issues relating to climate change this full securitisation can be recognised, for instance in the migration policy of the EU, where forced migration resulting from climate change has been framed as a security issue since 2008 (Trombetta, 2014, p. 144). The aspect that makes the successful securitisation of climate change by the European Union unique is that the organisation has been accepted by both the external, international community, and internal audiences as taking the leading role in tackling climate change (Dupont, 2019, p. 383).

Acknowledging this full securitisation, scholarly debates have shifted their focus to whether this full securitisation is appropriate and desirable. A frequent critique on the securitisation of climate change is that it will lead to the inappropriate adoption of extraordinary security measures (Oels, 2012, p. 185). However, concerning the European Union, the securitisation of climate change has not resulted in the adoption of these security measures, but instead reinforced environmental measures (Rodigues de Brito, 2012, p. 120). It thus seems that, at least for the EU, this critique is not valid.

2.3 The framings of security

Academic literature on climate change and security has long discussed whether the two should be linked to each other. Since the early work of Deudney (1990), scholars in the field of security studies have debated whether environmental problems such as climate change should be linked to security. Influential in this regard is the work by Barnett (2003), being one of the first prominent works exploring climate change as a security issue. Barnett (2003, p. 14) argues

that historically, the field of environmental security emerged with the intention of exposing the inadequacy of securitised military actions in regard to climate change, and to elevate climate change from the level of 'low politics' to 'high politics', getting states to commit more resources to address climate change. But this has not been the result. Instead, a militarisation of climate change problems has occurred, emphasising climate change as a cause of violent conflict rather than framing it as human insecurity (Barnett, 2003, p. 14). Scholars against the linking of climate change and security argue that it could lead to a sense of hopelessness with the wider public, who will view climate change as an unbeatable challenge, and to ineffective solutions such as focusing on national military responses or drawing attention away from existing development problems posing more immediate threats to vulnerable societies (Deudney, 1990, pp. 474-475; Brown, Hammill, & McLeman, 2007, pp. 1153-1154).

On the other side of the spectrum, scholars arguing for linking climate change to security argue that this linkage further encourages politicians to reduce emissions and invest in climate adaptation (Brown et al., 2007, p. 1154). Although this debate on the desirability of linking climate change to security has not been concluded, empirical findings have shown that climate change is threatening security, and that climate change is increasingly linked to security by politicians (Hulme, 2013, pp. 284–289; Adger et al., 2014, p. 758; Stark, 2014). Scholars have argued that research should explore when particular visions of security 'win out' over others, looking beyond merely the act of 'securitising' or 'desecuritising', to gain further knowledge on discourses of security underpinning particular representations (McDonald, 2008, p. 582), and thus it is useful to understand the security framings used to discuss climate change. In this regard, scholars have focused on the United Nations, and found that it has shifted from a state-security perspective towards a more human security framing (Floyd, 2015, pp. 119, 128; Mastrangelo, 2015, p. 1). However, remarkably little has been written on the European Union and its security framings towards climate change. Floyd (2015) shows that in EU reports, climate change is primarily connected to traditional security concerns such as climate-induced conflict. But this research still does not focus on the internal dynamics of the EU, for instance by focusing on debates in the European Parliament.

2.4 Bridging the gap

Thus, while academic literature has focused extensively on comparing the successfulness of securitisation between international organisations, on the European Union's successful securitisation of climate change, the processes of securitisation, and on the framings of security, little attention has been paid to the security discourses used within international

organisations, such as the European Parliament. Additionally, there is a clear contrast in how an abundance of research has focused on whether the European Union has successfully securitised climate change, without focusing on how exactly it has done so. Furthermore, examining the EU is particularly important in the broader perspective of the EU being a deviant case among international organisations for its successful securitisation of climate change (Oels, 2012, p. 195; Floyd, 2015, p. 132; Dupont, 2019, p. 369). Hence, the thesis aims to bridge this gap by answering the research question:

How did the security narratives of climate change in debates in the European Parliament change from 2005 to 2011?

3. Theoretical framework

The following section presents the theoretical framework of this thesis. First, it will be discussed why securitisation theory is the most appropriate theoretical approach towards the research question. This will be followed by a conceptualisation of security narratives. Subsequently, the Copenhagen School of securitisation theory will be examined. Lastly, the theoretical framework will conclude with the two hypotheses for this thesis.

3.1 The theoretical approach

Climate change extends beyond the realm of military threats, affecting many security dimensions. An appropriate theoretical approach to the thesis should thus consider that security is not purely about military threats to the survival of the state. To this end, securitisation theory is appropriate for this thesis, as is moves beyond merely military threats to state survival by also considering environmental, economic, societal, and political threats as potential security threats (Nyman, 2018, p. 101; Emmers, 2016, p. 169). It should be noted, however, that there is no unified, 'grand theory' of securitisation (Scott, 2012, p. 221; Sperling & Webber, 2016, p. 24). There can be distinguished between three main perspectives of securitisation theory on climate change, namely the Copenhagen School, the Paris School, and the human security perspective (Oels, 2012, p. 185). For this thesis, the Copenhagen School's theoretical approach will be adopted because this school considers rhetorical performance, such as speech acts, to be of importance, in contrast to the other two perspectives (Sperling & Webber, 2016, p. 24). Rhetorical performance is deemed important as the thesis analyses security narratives in European Parliamentary debates, in which rhetorical performance is essential.

However, a limitation of merely adopting the Copenhagen School's approach towards securitisation is its insistence that only uttering the word 'security' starts a process of securitisation (Wæver, 2007, p. 73). Because this thesis aim to analyse the security narratives around climate change, which are broader than merely the word 'security', the Copenhagen School's theoretical approach is supplemented by the sociological securitisation perspective identified by Balzacq (2011). This sociological securitisation entails the use of speech, images, emotions, and metaphors by a securitising actor who aims to create an sense of immediate, critical vulnerability of a referent object to advance the necessity of adoption of a customised policy to block the threat to the referent object as soon as possible (Balzacq, 2011, p. 3). Combining the approaches of the Copenhagen School and the sociological securitisation perspective allows for a broader the securitisation approach to not merely the uttering of the word 'security', which is more suitable for the thesis. By confronting the narrowness of the

Copenhagen School of securitisation theory in adopting a broader scope, the thesis acknowledges scholarly literature that has argued that a broader securitisation framework has analytical value (McDonald, 2008, p. 582).

There are, however, other limitations of securitisation theory. A frequent critique on securitisation theory is that it is problematically narrow in three main aspects. The first is that the focus of securitisation theory is too often merely on the dominant actors, usually political leaders (McDonald, 2008, pp. 563-564). A second critique is that by focusing on speech acts, the focus is too often only on one moment (Knudsen, 2001, pp. 356, 365; McDonald, 2008, p. 563; Williams, 2003, p. 528; Jarvis & Legrand, 2017, pp. 149-150). And lastly, securitisation theory is often criticised for being too focused on only the designation of security threats (Jackson, 2006, p. 299; McDonald, 2008, p. 563). However, for this thesis, these limitations are not deemed as problematic. Since the thesis is a case study of the EP, the focus will not be too narrow on merely the dominant actors, but instead on all narratives in the parliamentary debates. Additionally, the thesis circumvents the problem of a narrow focus on only the designation of security threats by supplementing the Copenhagen School's theoretical approach with a broader approach outlined by Balzacq (2011). Most importantly, however, is that research has argued that securitisation theory is most useful when used to understand the importance of discursive interventions framing issues as security threats from 11 September 2001 onwards and in the framing of threats by authoritative politicians in western liberal democracies (McDonald, 2008, pp. 581-582). As the focus of the thesis will revolve around security narratives in the European Parliament from 2005 to 2011, approaching the thesis from the perspective of securitisation theory is deemed particularly useful and appropriate.

3.2 Conceptualisation security narratives

Within securitisation theory, numerous scholars have distinguished between different framings of security and have researched the importance of different security narratives. As the change in security narratives will be researched, it is essential to conceptualise the different security narratives and embed them in the theoretical model used for this thesis.

In the academic literature, five main conceptualisations of security narratives in relation to climate change are provided. The first distinguishes between six main frames, these being disruption of ecosystems, energy problems, population problems, food problems, economic problems, and civil strife (Buzan et al., 1998, pp. 74-75). Dalby (2018) identifies seven frames, namely cooperative security, ecological security, climate security, environmental security, human security, global security, and national security (Dalby, 2018, p. 531). The third

conceptualisation of security narratives on climate change provided in the academic literature does so on three main frames, namely territorial, individual, and planetary (Diez, von Lucke & Wellmann, 2016, p. 21). Conversely, McDonald (2013, p. 49) distinguishes between four security frames, namely national, human, international, and ecological security. Lastly, Detraz and Betsill (2009, p. 303) argue for two security perspectives, namely the environmental security perspective and the environmental conflict perspective. A comparison of the five conceptualisations shows a significant similarity. For instance, disruption of ecosystems overlaps with ecological and climate security, with planetary, with ecological, and with the environmental security perspective. Conversely, population and food problems overlap with human security, and individual. Additionally, civil strife overlaps with territorial and with global and national security to be found in both Dalby (2018) and McDonald (2013). Because of this significant similarity, this thesis will draw on all five conceptualisations, as no major contradictions are to be found in the scholarly literature relating climate change to security.

3.3 The Copenhagen School of securitisation theory

Bridging traditional and critical security studies, securitisation theory is a relatively new approach (Nyman, 2018, p. 101). The theory was developed through a number of academic works, culminating in the major work by Buzan, Wæver, and de Wilde (1998) (Nyman, 2018, p. 101; Peoples & Vaughan-Williams, 2020, p. 114). The theory stipulates that "[b]y uttering 'security', a state-representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it" (Wæver, 2007, p. 73). In short, by labelling something as a security issue, it becomes one (Wæver, 2012, p. 53). Something can become a security issue through discursive politics, and in this sense, utterances of security 'do' things, they move a specific issue into the realm of security (Balzacq, 2011, p. 1). Scholars from the Copenhagen School argue that a referent object has not been fully securitised until it has been moved out of 'normal' democratic politics to emergency undemocratic politics, which is only possible is if particular conditions have been met, including that the relevant audience has accepted the securitisation move (Buzan et al., 1998, pp. 24–25). Current debate within the Copenhagen School centres around whether securitisation is desired. Scholars have argued that securitisation is characterised by an authoritarian approach, bringing in exceptional measures and moving an issue outside democratic debate (Oels, 2012, p. 191; Trombetta, 2014, p. 132). This stands in contrast to arguments by other scholars, who have argued that these extraordinary measures are quite rare and not very evident,

and that securitisation can be morally right and not necessarily negative (Floyd, 2011, p. 427; Oels, 2012, p. 192; Roe, 2012, p. 261).

As the thesis analyses security narratives, it is essential for these security narratives to also be embedded in the theoretical model. Scholars have distinguished between different security narratives and debated in what instances these narratives are expected to be more or less dominant. First, a distinction of security narratives can be made distinguishing between 'low politics' and 'high politics' security narratives. A successful securitisation of climate change would entail a successful move from 'low politics' to 'high politics' (Detraz & Betsill, 2013, p. 313). Regarding international organisations, 'low politics' can be understood as policies that do not attract high levels of scrutiny or public debate, centring around economic, environmental, and human rights issues (Cardwell & Jančić, 2019, p. 366; Lahav & Lavenex, 2012, p. 747; Schmidt, 2012, p. 15). This is in line with more specific findings on the environmental security perspective and the human security perspective. Scholars have argued that a successful securitisation of climate change in international organisations would show extraordinary measures and policy changes (Dupont, 2019, p. 370; Sperling & Webber, 2019, p. 238), and that the environmental security perspective has not had a significant impact on policy outcomes (McDonald (2013, p. 49). Taking this into account, the argument by McDonald (2013, p. 49) can be reversed, expecting that when significant, extraordinary policy measures are adopted, the environmental security discourse is most likely not the dominant discourse. Similarly, in scholarly literature on the human security perspective, often revolving around the United Nations, a wide consensus exists that the UN has adopted a human security perspective towards climate change and that is has been unsuccessful in securitising climate change (Detraz & Betsill, 2009, p. 303; Oels, 2012, pp. 189-190; Arias, 2021, p. 20; Maertens, 2021, pp. 640, 656-657). Overall, this illustrates that cooperative, environmental, and human security narratives have not been able to successfully securitise the issue of climate change, increasing the likeliness that these security perspectives are not most prominently used in international organisations that have successfully securitised climate change.

Conversely, 'high politics' security narratives are about military and security issues, often pertaining to political and national integrity and the very survival of the state (Lahav & Lavenex, 2012, p. 747; Schmidt, 2012, p. 15). Theoretically, these can be expected to be more dominant after a securitisation of an issue, as both global and national security are traditional 'high politics' narratives. Additionally, academic findings suggest that national security has raised the importance of climate change as an issue primarily in the developed world (McDonald, 2013, p. 46). This increases the likelihood that, when international organisations

are mainly based in developed states and have successfully securitised climate change, this is done through a national security perspective (McDonald, 2013, p. 46).

3.4 Hypotheses

The securitisation of climate change thus entails its movement from 'low politics' to 'high politics'. The above sections illustrated that policies that do not attract high levels of scrutiny fall under 'low politics', while 'high politics' policies do attract high levels of scrutiny. Additionally, the content of the issues can also be contrasted, as 'low politics' centres around economic, environmental, and human rights issues, while 'high politics' centres around the political and national integrity and the very survival of the state (Cardwell & Jančić, 2019, p. 366; Lahav & Lavenex, 2012, p. 747; Schmidt, 2012, p. 15). Overall, when an international organisation has successfully securitised an issue, it is regarded as a 'high politics' issue (Dupont, 2019, p. 380). All in all, acknowledging that the securitisation process entails a move from 'low politics' to 'high politics' and considering the differences between the content of the issues of concern to 'low politics' compared to those of concern to 'high politics' the following hypotheses are proposed this thesis:

H1: *Cooperative security, environmental security, and human security are most dominant before the securitisation of climate change in the European Union.*

H2: *Global security and national security are most dominant after the securitisation of climate change in the European Union.*

4. Research design

The European Parliament is chosen as a case for the thesis, to shed light on what security narratives on climate change are most often used in the parliamentary debates. In the following, the research design of the thesis will be elaborated on by first discussing the methodology, then the case selection and data collection, concluding with the operationalisation.

4.1 Methodology

To answer the research question, this thesis will conduct a single case study of the European Parliament. A qualitative content analysis will be carried out, since security narratives have to do with the exposing of meanings and purposes embedded within text, and qualitative content analysis is well-suited for this (Halperin & Heath, 2020, p. 376). To this end, the debate transcripts used as data for the thesis will be coded by colour-coding the text. This is suitable, as the coding unit is themes, understood as single ideas or single assertions about certain subjects (Halperin & Heath, 2020, p. 378). The data will be analysed by looking for differences in the categories in the coding frame from 2005 to 2011.

The primary advantage of a case study is that it allows for an intensive, detailed examination of a phenomenon with rich textual description, providing more in-depth knowledge on the case, while offering a good balance between theory and evidence (Halperin & Heath, 2020, p. 234, 237; Toshkov, 2016, p. 286). Additionally, case studies are embedded in the wider academic debate, and can contribute to this debate by addressing theories or issues having a wider intellectual relevance and may be able to make inferences applying to other cases (Halperin & Heath, 2020, p. 234). Since there is little academic knowledge on security narratives within international organisations and because the European Parliament is a unique case, making it appropriate to study for comparison to other international organisations, a case study is particularly suitable.

However, several limitations accompany the use of a case study. These lie mostly in the generalisability of the findings, which often proves to be difficult (Halperin & Heath, 2020, p. 237). But, as the purpose of this thesis lies primarily in providing more academic knowledge on a phenomenon that has not sufficiently been studied, a single case study is deemed the most appropriate research design.

4.2 Case selection and data collection

The selection of the European Parliament as a case for this thesis was decided based on it being a deviant case, as the EU is remarkable in its successful securitisation of climate change

(Oels, 2012, p. 195; Floyd, 2015, p. 132; Dupont, 2019, p. 369; Sperling & Webber, 2019, pp. 253-254; Halperin & Heath, 2020, p. 236). Because the EP is the principal organ of the European Union for debates and discussions, it is best suited to study speech acts, these being of major importance for security narratives surrounding climate change (Nello, 2011, p. 59; Emmers, 2016, p. 170; Nyman, 2018, pp. 102-103). The period of 2005 to 2011 is chosen, as this period covers three years when climate change was not yet securitised in the EU and three years when it was (Floyd, 2015, p. 132). The thesis will limit itself to research on a period of six years because this allows for a more in-depth study, while also being within the limited scope of a bachelor thesis. The exact moment climate change was securitised in the EU is after the publication of the Report on Climate Change and International Security, and the publishing date of this report was 14 March 2008 (European Union, 2008; Floyd, 2015, p. 132). Therefore, every European Parliamentary debate after this date will be regarded as 'after 2008', short for 'after 14 March 2008'.

For its analysis, the thesis will rely on primary data of speeches and debates in the EP. The written transcripts of these speeches and debates are derived from the website of the European Parliament.

4.3 Operationalisation

Because this thesis is examining the security narratives surrounding climate change in European Parliamentary debates, it is first necessary to establish a definition of climate change before operationalising the different security narratives.

Climate change is a problematic concept, in that scholars have not been able to produce a consensus on the conceptualisation. Two influential conceptualisations are those by the Intergovernmental Panel on Climate Change (IPCC) and by the United Nations Framework Convention on Climate Change (UNFCCC). The IPCC conceptualises climate change as

> a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions and persistent anthropogenic changes in the composition of the atmosphere or in land use (Intergovernmental Panel on Climate Change, 2018, p. 544).

In contrast, the UNFCCC conceptualises climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods" (United Nations, 1992, p. 7). A key difference between the two conceptualisations is that the UNFCCC conceptualisation is narrower in its focus compared to the IPCC conceptualisation, by merely focusing on human activity. For this thesis, the conceptualisation of the UNFCCC is deemed most suitable, as in the years 2005 to 2011, the role of human activity in climate change receives the most emphasis in scholarly literature on the EU's successful securitisation (Floyd, 2015; Dupont, 2019).

Extending on this, it is necessary to operationalise the different security narratives. For the content analysis, five main security frames regarding climate change will be used. Drawing on the academic literature, five main conceptualisations of security frames have been discussed in the theoretical framework. To fulfil the criterium of mutual exclusiveness of the categories in the coding scheme to enable an effective content analysis, the thesis will use five categories for security narratives. Drawing on Buzan et al. (1998), Detraz and Betsill (2009), McDonald (2013), Diez et al. (2016), and Dalby (2018), the categories that will be adopted for the coding frame are presented in Table 3 in Appendix II, and they are briefly stated below (see Table 2).

Table 2. Coding scheme of security narratives

Category	Description	Indicators
Cooperative security	Includes references to how agents have to work together to tackle the threats climate change poses.	Framings of climate change as a global threat in need of a global solution and economical issues because of climate change.
Environmental security	Includes references to threats to natural ecosystems.	Loss of biodiversity, deforestation, desertification, depletion of the ozone layer, and forms of pollution, reducing global warming, and references to resource management strategies.
Human security	Includes references to the threats that climate change poses explicitly to people.	Human-centred, population growth and consumption beyond the earth's carrying capacity, epidemics, famines, poverty, bad health conditions more generally, and climate refugees.

Global security	Focuses on the avoidance of international wars resulting from climate change.	References to war-related environmental damage, global scale and global violence related to environmental degradation.
National security	Focuses on the state, sovereignty, and the military control of national territory.	References to threats revolving around the state, for instance migration threatening state borders.

5. Analysis

The thesis sought to fill theoretical and empirical gaps in the literature by undertaking a case study of the security narratives used in the European Parliament. In the following section, the results of the thesis will be presented. The results will be structured by distinguishing between 'low' and 'high politics' security narratives, and by distinguishing between before and after 2008. Subsequently, the results will be discussed by reference to the hypotheses.

5.1 Results

5.1.1 'Low politics' security narratives in the European Parliament before 2008

Distinguishing between the different 'low politics' security narratives, it can be observed that the perspective of environmental security is most dominant in the European Parliamentary debates before 2008. Members of the European Parliament (MEPs) framed climate change as an environmental security threat substantially more often than they framed climate change through the framings of cooperative and human security. Illustrative for the environmental perspective is the involvement of severe weather situations, such as "hurricanes, prolonged droughts or floods" (Dimas in European Parliament, 2006a). Furthermore, references to ecological effects and the influence of greenhouse gasses are mentioned regularly. This can be seen in the statements that "if the sea level increases by half a metre, large parts of my country will flood if nothing is done about it" and "climate change is probably proceeding even more quickly than we thought and that greater reductions in the quantity of greenhouse gases in the atmosphere are also needed in order to prevent this change" (Liotard in European Parliament, 2005a; Sjöstedt in European Parliament, 2005a). Conversely, for human security framings, health problems resulting from climate change are often used to frame climate change as a threat. In relation to human security, an interesting finding is that relatively few references are made to migrants and refugees as casualties of climate change.

5.1.2 'High politics' security narratives in the European Parliament before 2008

As elaborated in the theoretical framework, 'high politics' entails the categories 'global security' and 'national security'. From this analysis, it is evident that the global and national security perspectives are invoked considerably less than the 'low politics' security narratives. In the debates before 2008, climate change was framed from either a global or national security perspective an insubstantial amount of times compared to the cooperative, environmental, and human security framings. From the global security perspective, a characteristic contribution in the EP from the global security perspective is that climate change should be recognised "as one

of the most significant threats to global security" (Vaidere in European Parliament, 2006a). Interestingly, compared to the 'low politics' security narratives before 2008, 'high politics' security narratives before 2008 frame climate change almost exclusively as an all-encompassing threat, while cooperative, environmental, and human security framings frame it much more narrowly.

5.1.3 'Low politics' security narratives in the European Parliament after 2008

The analysis of the 'low politics' security narratives in European Parliamentary debates after 2008 illustrates that climate change was framed as an environmental security threat most often. In comparison, climate change was framed as a cooperative or human security threat substantially less, although still on a regular basis.

Regarding cooperative security, it is evident that the European Union considers itself to be the global leader on tackling climate change. A certain tension can be observed between MEPs wanting to remain a global leader on tackling climate change, while simultaneously understanding that they are not able to solve the issue of climate change alone, but that it is a global problem in need of a global solution. An example of this tension can be seen when MEPs frame climate change as a fight "in which all the countries in the world will participate", while simultaneously stating that "of course, the EU's efforts will not be enough, but we cannot hope to have an international agreement if we do not take active leadership regarding this (Dimas in European Parliament, 2008a).

Additionally, it can be observed that, after 14 March 2008, the cooperative security framing has increasingly emphasised the role of the economic crisis of 2008 by mentioning this crisis as a reason for why the European Union is not able to do everything on its own to tackle climate change. However, at the same time the issue of climate change is also seen as an opportunity for sustainable economic investment and growth. MEPs see the European Union in this regard as "the only international organisation which, at a time of [economic] crisis, wants to go against the grain and be a leader in the fight against climate change" (Ziobro in European Parliament, 2011b).

An interesting aspect of the use of the human security perspective in framing climate change as a security threat is that, since 2008, MEPs use it remarkably often to stress the health threats that climate change poses. The few references to health threats posed before 2008 primarily revolved around the higher risk of climate-related diseases. Since 2008, however, the emphasis has become broader. Although MEPs still alluded to climate-related diseases, there are considerably more references to public health as a whole. Additionally, references are made

to deaths because of health-related climate change risks, while these were not made before 2008. Although it is difficult to argue conclusively on this, it seems to show that, within the human security perspective, a change has occurred where allusions to climate change are referring to more serious consequences.

5.1.4 'High politics' security narratives in the European Parliament after 2008

From 2008 to 2011, the occasions that MEPs used either a global or national security framing were considerably less than their use of cooperative, environmental, and human security narratives. Contrasting the invoked global security perspectives to climate change before 2008 to those since 2008 gives an interesting difference in framings within this perspective. Before 2008, the global security perspective used in European Parliamentary debates often emphasised of climate change as being a threat multiplier with the potential to exacerbate the threat of global conflict. This can be seen in the following quote "we will face the prospect of wars being fought not only for oil, but also, conceivably, of wars and civil wars being fought to gain possession of reservoirs of water" (Gabriel in European Parliament, 2007a). Comparing this to the occasions when the global security perspective was used after 2008, the emphasis has changed considerably. Instead of emphasising the threat climate change poses, as was done before 2008, since 2008, the emphasis has shifted to how the threats can be combatted. The global security perspective is since 2008 often used to first emphasise the need to do something about the issue, whereas this was not the case before 2008. Instances that illustrate this change of the use of the global security perspective are "[i]t is therefore necessary to sanction the right to water and pursue policies enabling that right to be implemented" and climate change "is set to become integral and recurrent and cannot be controlled without drastic changes to agricultural policy and farming practice" (Musacchio in European Parliament, 2008a; Dimas in European Parliament 2008b).

5.2 Discussion

In the following, the hypotheses proposed for this thesis will be discussed and evaluated. The first hypothesis of this thesis expected that the cooperative, environmental and human security perspectives are most dominant before the securitisation of climate change in the European Union. The analysis of the debates shows that this is indeed the case. These three categories were used considerably more by MEPs in the period before the securitisation of climate change in the EU than the 'high politics' security narratives of global security and national security. However, it could be argued that the dominant use of 'low politics' security narratives is not influenced by the fact that climate change was not yet securitised in the

European Union before 2008. Although this is possible, it does not seem plausible, especially when confronted with the case of the UN, where scholars have found that the organisation has not securitised climate change, and that it primarily adopts a human security perspective (Oels, 2012, pp. 189-190; Arias, 2021, p. 20). This illustrates that the United Nations is another case where 'low politics' security narratives are coupled with the absence of a full securitisation of climate change. There are other cases, beyond international organisations, that illustrate the same relationship. Diez et al., (2016, p. 145) found that the United States saw a high securitisation of climate change, along with a dominance of territorial danger discourses. This is similar to the European Parliament in that territorial danger discourses in Diez et al. (2016) fit precisely into the category 'national security' used in this thesis. This therefore further illustrates the positive relationship between a prominence of 'high politics' security narratives and a successful securitisation, and thus illustrates that, by reversing the logic found in Diez et al. (2016), the absence of successful securitisation can be linked to the lesser use of 'high politics' discourses for the case of the European Parliament before 2008. Additionally, this study found regarding the case of Mexico that there was no fully successful securitisation, and that a securitising emphasis was placed on individual and planetary risk (Diez et al., 2016, p. 145). The security narratives of individual and planetary risk correspond to the 'low politics' security narratives of human and environmental security in this thesis, further substantiating the relationship between unsuccessful securitisation and the dominance of 'low politics' security narratives. All in all, the non-securitised nature of climate change as stipulated in the first hypothesis can be seen as a more credible explanation in accounting for why cooperative, environmental, and human security were the most dominant security perspectives towards climate change.

The second hypothesis of this thesis expected that global and national security would be most dominant after the securitisation of climate change in the European Union. However, the qualitative analysis of the debates found that this was not the case. The two security frames of global and national security were used considerably less than the security frames of cooperative, environmental, and human security after the securitisation of climate change in the EU. Furthermore, there was no fundamental increase in these perspectives compared to the period before 2008. Therefore, this clearly contradicts the hypothesis. To this end, an explanation for the difference between the anticipated dominance of global and national security compared to the observation of this thesis that 'high politics' security narratives were not dominant after 14 March 2008 has to be found.

In accounting for this observed result, three explanations can be distinguished. Firstly, a possible explanation has to do with the statements themselves, and whether 'high politics' climate security narratives are more effective than 'low politics' climate security narratives. Regarding climate change, the scholarly literature argues that a discursive shift from 'low politics' to 'high politics' is counterproductive in the development of a global response to climate change, as it would narrow policy options down to merely avoiding conflict (Detraz & Betsill, 2009, p. 313). It might thus be more beneficial for MEPs to avoid 'high politics' security narratives, to keep all policy options open. This would be fitting, as research has found that the EU's climate security discourse has evolved to be able to meet new challenges and issues, which would not be possible if the framing of climate change was merely through 'high politics' narratives, as this would have narrowed down policy options (Bremberg, et al., 2018, p. 633).

Secondly, the observed difference between hypothesis and outcome can also be accounted for by the agenda of European Parliament. In research on the EP, Greene and Cross (2017, p. 77) found that the EP's agenda reacts to exogenous events such as European Union Treaty referenda and the Euro Crisis. The Euro Crisis encompassed the years 2009 to 2015 (Banerjee, Kouretas, Papadopoulos & Tavlas, 2021, p. 1392). That the Euro Crisis influences debate in the EP in particular is acknowledged by other scholars as well (Braghiroli, 2015, pp. 96-97). Considering that the framings of cooperative and human security are, of all the security framings in this thesis, most closely related to the Euro Crisis, the Euro Crisis could account, at least to some extent, for the high occurrence of 'low politics' security narratives around climate change since 2008 in the European Parliament.

Thirdly, an explanation for why the second hypothesis is not in accordance with the observed outcome of the analysis could be explained by the structure of the EP and the EU. Greene and Cross (2015, p. 9) found that whether an MEP contributes to a European Parliamentary debate is influenced by MEP ideology and voting behaviour. Furthermore, these authors have demonstrated how the committee structure of the EP strongly influences the content of speeches and contributions in European Parliamentary debates (Greene & Cross, 2017, pp. 91-91). This is because committee membership relevant to a particular topic will fundamentally increase the chance that an MEP will contribute to debates about the topic (Greene & Cross, 2017, pp. 91-92). In the data used for this thesis, four of the fifteen sources are debates in response to reports by the Committee on the Environment, Public Health and Food Safety or oral questions to this Committee European Parliament, 2005a, 2006b, 2011a, 2011b). Therefore, this could have affected the analysis of the thesis, accounting for the difference between the hypothesis and the observed result.

6. Conclusion

Employing a qualitative content analysis, this thesis has examined how the security narratives around climate change used in European Parliamentary debates changed from 2005 to 2011. The thesis proposed two hypotheses, grounded in securitisation theory's Copenhagen School, supplemented by the sociological securitisation perspective outlined by Balzacq (2011) and the academic literature on security narratives. These hypotheses expected that cooperative security, environmental security, and human security would be most dominant before the securitisation of climate change in the EU, and that global security and national security would be most dominant after the securitisation of climate change in the European Union. The findings of the qualitative analysis conducted in this thesis were partly in line with the hypotheses. Cooperative, environmental, and human security framings were, as expected, most dominant in European Parliamentary debates before 2008. However, a crucial finding of the thesis was that global and national security framings were not most dominant after the securitisation of climate change in the European Union, contradicting the second hypothesis. This is a critical finding in that it goes against theoretical expectations. All in all, the research question can be answered by concluding that from 2005 to 2011 no substantial change in the security narratives around climate change happened in debates in the European Parliament. Although changes within security perspectives could be observed, a shift from 'low politics' security narratives being dominant before 2008 to 'high politics' security narratives being dominant since 2008 was not observed.

For this thesis, several limitations can be observed. Firstly, in regard to the data used for the thesis, it has to be noted that not every European Parliamentary debate in the relevant period was analysed due to time constraints. Therefore, it is not possible for this thesis to have fully conclusive findings on the period analysed for the thesis. However, given that a considerable amount of data was analysed and that the analysed debates were most relevant in regard to climate change, the findings are reliable and well-embedded. Secondly, several limitations can be observed concerning case studies. Generally, the generalisability of the findings can be limited in case studies and case studies always bring the risk of selection bias, as the selection of merely one case excludes the application of the theory to all other cases. Although the external validity of case studies is limited, the use of a case study for this thesis allowed for a detailed description of the security narratives in European Parliamentary debates, ensuring a high internal validity.

Through this thesis, it has become clear that further academic research is essential for better understanding the security narratives used in international organisations, and how these narratives change over time. This thesis therefore calls for further research into the security narratives invoked in European Parliamentary debates after 2011, to analyse whether a change to 'high politics' security narratives did occur then. This thesis will conclude by a more general encouragement for future research to conduct single case studies on other international organisations, to further understand the relationship between the degree of securitisation and the use of different security narratives, hereby moving towards a more in-depth understanding of the processes of securitisation.

7. Bibliography

Adger, W. N., Pulhin, J. M., Barnett, J., Dabelko, G. D., Hovelsrud, G. K., Levy, . . . & Vogel, C. H. (2014). Human security. In C. B. Field, V. R. Barros, D. J. Dokken, K. J. Mach, M. D. Mastrandrea, T. E. Bilir, . . . & L. L. White (Eds.), *Climate change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 755–791). Cambridge, United Kingdom: Cambridge University Press.

Arias, S. B. (2021). Who securitizes? Climate change discourse in the United Nations. *International Studies Quarterly*, 1–37.

Balzacq, T. (2011). A theory of securitization. In T. Balzacq (Ed.), *Securitization Theory* (pp. 1–30). Abingdon, United Kingdom: Routledge.

Banerjee, A., Kouretas, G. P., Papadopoulos, A. P., & Tavlas, G. S. (2021). Ten years after the start of the euro crisis: Lessons for financial markets and macroeconomic policies. *Oxford Economic Papers, 73*(4), 1392–1403. doi: 10.1093/oep/gpab048

Barnett, J. (2003). Security and climate change. *Global Environmental Change, 13*(1), 7–17. doi: 10.1016/s0959-3780(02)00080-8

Biermann, F., & Bauer, S. (2004). Assessing the effectiveness of intergovernmental organisations in international environmental politics. *Global Environmental Change, 14*(2), 189–193. doi: 10.1016/s0959-3780(03)00025-6

Braghiroli, S. (2015). An emerging divide? Assessing the impact of the Euro Crisis on the voting alignments of the European Parliament. *The Journal of Legislative Studies, 21*(1), 96–114. doi: 10.1080/13572334.2014.939559

Bremberg, N., Sonnsjö, H., & Mobjörk, M. (2018). The EU and climate-related security risks: A community of practice in the making? *Journal of European Integration, 41*(5), 623–639. doi: 10.1080/07036337.2018.1546301

Brown, O., Hammill, A., & McLeman, R. (2007). Climate change as the 'new' security threat: Implications for Africa. *International Affairs, 83*(6), 1141–1154. doi: 10.1111/j.1468-2346.2007.00678.x

Brzoska, M. (2009). The securitization of climate change and the power of conceptions of security. *Sicherheit & Frieden, 27*(3), 137–145. doi: 10.5771/0175-274x-2009-3-137

Buzan, B., Wæver, O., & de Wilde, J. (1998). *Security: A new framework for analysis*. Boulder, United States: Lynne Rienner Publishers.

Cardwell, P. J., & Jančić, D. (2019). The European Parliament and development cooperation: Democratic participation in the 'low politics' of EU external relations. *Journal of European Integration*, *41*(3), 365–381. doi: 10.1080/07036337.2019.1599369

Dalby, S. (2018). Environmental change. In P. D. Williams & M. McDonald (Eds.), *Security Studies: An Introduction* (3rd ed., pp. 526–540). Abingdon, United Kingdom: Routledge.

Dellmuth, L. M., Gustafsson, M., Bremberg, N., & Mobjörk, M. (2018). Intergovernmental organizations and climate security: Advancing the research agenda. *WIREs Climate Change*, *9*(1), 1–13. doi: 10.1002/wcc.496

Detraz, N., & Betsill, M. M. (2009). Climate change and environmental security: For whom the discourse shifts. *International Studies Perspectives*, *10*(3), 303–320. doi: 10.1111/j.1528-3585.2009.00378.x

Deudney, D. (1990). The case against linking environmental degradation and national security. *Millennium*, *19*(3), 461–476. doi: 10.1177/03058298900190031001

Dewi, M. K. (2020). Failure of securitizing the climate change issue at the United Nations Security Council (2007–2019). *Andalas Journal of International Studies*, *9*(2), 168–184. doi: 10.25077/ajis.9.2.131-148.2020

Diez, T., von Lucke, F., & Wellmann, Z. (2016). *The securitisation of climate change: Actors, processes and consequences* (1st ed.). Abingdon, United Kingdom: Routledge.

Dupont, C. (2019). The EU's collective securitisation of climate change. *West European Politics*, *42*(2), 369–390. doi: 10.1080/01402382.2018.1510199

Emmers, R. (2016). Securitization. In A. Collins (Ed.), *Contemporary Security Studies* (4th ed., pp. 168–181). Oxford, United Kingdom: Oxford University Press.

European Commission. (2019, November 27). *Speech by President-elect von der Leyen in the European Parliament Plenary on the occasion of the presentation of her College of Commissioners and their programme*. Retrieved from www.ec.europa.eu/commission/presscorner/detail/en/speech_19_6408

European Parliament. (2005a, May 10). *Climate change*. Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2005-05-10-ITM-022_EN.html

European Parliament. (2005b, November 16). *Climate change – Beating global climate change.* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2005-11-16-ITM-004_EN.html

European Parliament. (2006a, January 16). *Climate change.* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2006-01-16-ITM-018_EN.html

European Parliament. (2006b, October 25). *Nairobi Conference on Climate change (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2006-10-25-ITM-015_EN.html

European Parliament. (2007a, January 31). *Climate change (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2007-01-31-ITM-016_EN.html

European Parliament. (2007b, January 31). *Climate change (continuation of debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2007-01-31-ITM-018_EN.html

European Parliament. (2008a, April 10). *The green paper on 'Adapting to climate change in Europe – Options for EU action' (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2008-04-10-ITM-004_EN.html

European Parliament. (2008b, May 21). *Scientific facts of climate change: Findings and recommendations for decision-making (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2008-05-21-ITM-003_EN.html

European Parliament. (2009a, February 4). *2050: The future begins today − Recommendations for the EU's future integrated policy on climate change (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-6-2009-02-04-ITM-003_EN.html

European Parliament. (2009b, November 24). *Preparation of the Copenhagen Summit on climate change (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-7-2009-11-24-ITM-003_EN.html

European Parliament. (2010a, January 20). *Outcome of the Copenhagen Summit on climate change (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-7-2010-01-20-ITM-011_EN.html

European Parliament. (2010b, November 24). *Preparations for Cancún Climate Change Conference (29 November – 10 December) (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-7-2010-11-24-ITM-014_EN.html

European Parliament. (2011a, September 13). *A comprehensive approach to non-CO2 climate-relevant anthropogenic emissions (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-7-2011-09-13-ITM-020_EN.html

European Parliament. (2011b, November 15). *Climate change conference in Durban (debate).* Retrieved from www.europarl.europa.eu/doceo/document/CRE-7-2011-11-15-ITM-013_EN.html

European Union. (2008, March 14). *Climate change and international security: Paper from the High Representative and the European Commission to the European Council*. Retrieved from www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf

Finnemore, M., & Sikkink, K. (1998). International norm dynamics and political change. *International Organization*, *52*(4), 887–917. doi: 10.1162/002081898550789

Floyd, R. (2011). Can securitization theory be used in normative analysis? Towards a just securitization theory. *Security Dialogue*, *42*(4–5), 427–439. doi: 10.1177/0967010611418712

Floyd, R. (2015). Global climate security governance: A case of institutional and ideational fragmentation. *Conflict, Security & Development*, *15*(2), 119–146. doi: 10.1080/14678802.2015.1034452

Greene, D., & Cross, J. P. (2015). Unveiling the political agenda of the European Parliament plenary. *Proceedings of the ACM Web Science Conference*, 1–10. doi: 10.1145/2786451.2786464

Greene, D., & Cross, J. P. (2017). Exploring the political agenda of the European Parliament using a dynamic topic modeling approach. *Political Analysis*, *25*(1), 77–94. doi: 10.1017/pan.2016.7

Halperin, S., & Heath, O. (2020). *Political research: Methods and practical skills* (3rd ed.). Oxford, United Kingdom: Oxford University Press.

Hulme, M. (2013). *Why we disagree about climate change understanding controversy, inaction and opportunity*. Cambridge, United Kingdom: Cambridge University Press.

Hurd, I. (2013). *International organizations: Politics, law, practice* (2nd ed.). Cambridge, United Kingdom: Cambridge University Press.

Intergovernmental Panel on Climate Change. (2018). *Special report: Global warming of 1.5°C.* Retrieved from www.ipcc.ch/sr15/chapter/glossary/

Jackson, N. J. (2006). International organizations, security dichotomies and the trafficking of persons and narcotics in Post-Soviet Central Asia: A critique of the securitization framework. *Security Dialogue*, *37*(3), 299–317. doi: 10.1177/0967010606069062

Jarvis, L., & Legrand, T. (2017). 'I am somewhat puzzled': Questions, audiences and securitization in the proscription of terrorist organizations. *Security Dialogue*, *48*(2), 149–167. doi: 10.1177/0967010616686020

Knudsen, O. F. (2001). Post-Copenhagen security studies: Desecuritizing securitization. *Security Dialogue*, *32*(3), 355–368. doi: 10.1177/0967010601032003007

Lahav, G., & Lavenex, S. (2012). International migration. In W. Carlsnaes, T. Risse, & B. A. Simmons (Eds.), *Handbook of International Relations* (2nd ed., pp. 746–774). Newbury Park, United States: SAGE Publications Ltd.

Maertens, L. (2021). Climatizing the UN Security Council. *International Politics*, *58*(4), 640–660. doi: 10.1057/s41311-021-00281-9

Mastrangelo, G. (2015). Human security, state security and the Charter of the United Nations. *Glendon Journal of International Studies*, *8*(1–2), 1–14.

McDonald, M. (2008). Securitization and the construction of security. *European Journal of International Relations*, *14*(4), 563–587. doi: 10.1177/1354066108097553

McDonald, M. (2013). Discourses of climate security. *Political Geography*, *33*, 42–51. doi: 10.1016/j.polgeo.2013.01.002

Nello, S. S. (2011). *The European Union: Economics, policies & history* (3rd ed.). New York City, United States: McGraw-Hill Education.

Nyman, J. (2018). Securitization. In P. D. Williams & M. McDonald (Eds.), *Security Studies: An introduction* (3rd ed., pp. 100–113). Abingdon, United Kingdom: Routledge.

Oels, A. (2012). From 'securitization' of climate change to 'climatization' of the security field: Comparing three theoretical perspectives. In J. Scheffran, M. Brzoska, H. G. Brauch, P. M. Link, & J. Schilling (Eds.), *Climate change, Human Security and Violent Conflict: Challenges for Societal Stability* (1st ed., pp. 185–205). New York City, United States: Springer.

Peoples, C., & Vaughan-Williams, N. (2020). *Critical security studies*. Abingdon, United Kingdom: Routledge.

Peters, K. (2018). Disasters, climate change, and securitisation: The United Nations Security Council and the United Kingdom's security policy. *Disasters, 42*, 196–214. doi: 10.1111/disa.12307

Rodigues De Brito, R. (2012). The securitisation of climate change in the European Union. In P. Heinrigs & M. Trémolières (Eds.), *West African Studies: Global Security Risks And West Africa: Development Challenges* (pp. 119–134). Paris, France: Organization For Economic Co-Operation & Development.

Roe, P. (2012). Is securitization a 'negative' concept? Revisiting the normative debate over normal versus extraordinary politics. *Security Dialogue*, *43*(3), 249–266. doi: 10.1177/0967010612443723

Schmidt, B. C. (2012). On the history and historiography of international relations. In W. Carlsnaes, T. Risse, & B. A. Simmons (Eds.), *Handbook of International Relations* (2nd ed., pp. 3–28). Newbury Park, United States: SAGE Publications.

Scott, S. V. (2012). The securitization of climate change in world politics: How close have we come and would full securitization enhance the efficacy of global climate change policy? *Review of European Community and International Environmental Law*, *21*(3), 220–230. doi: 10.1111/reel.12008

Simmons, B. A., & Martin, L. L. (2013). International organizations and institutions. In W. Carlsnaes & T. Risse, & B. A. Simmons (Eds.), *Handbook of International Relations* (2nd ed., pp. 326–351). Newbury Park, United States: SAGE Publications Ltd.

Sperling, J., & Webber, M. (2016). NATO and the Ukraine crisis: Collective securitisation. *European Journal of International Security*, *2*(1), 19–46. doi: 10.1017/eis.2016.17

Sperling, J., & Webber, M. (2019). The European Union: Security governance and collective securitisation. *West European Politics*, *42*(2), 228–260. doi: 10.1080/01402382.2018.1510193

Stark, J. (2014). *Climate change and conflict: Findings and lessons learned from five case studies in seven countries*. United States Agency for International Development. Retrieved from www.preventionweb.net/publication/climate-change-and-conflict-findings-and-lessons-learned-five-case-studies-seven

Toshkov, D. (2016). *Research design in political science* (1st ed.). Basingstoke, United Kingdom: Macmillan Publishers.

Trombetta, M. J. (2014). Linking climate-induced migration and security within the EU: insights from the securitization debate. *Critical Studies on Security*, *2*(2), 131–147. doi: 10.1080/21624887.2014.923699

United Nations. (1992). *United Nations framework convention on climate change*. Retrieved from https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change

Wæver, O. (2007). Securitization and desecuritization. In B. Buzan & L. Hansen (Eds.), *International Security* (1st ed., Vol. 3, pp. 66–98). Newbury Park, United States: SAGE Publications Ltd.

Wæver, O. (2012). Aberystwyth, Paris, Copenhagen: The Europeanness of new "schools" of security theory in an American field. In A. Tickner & D. L. Blaney (Eds.), *Thinking International Differently* (1st ed., pp. 48–71). Abingdon, United Kingdom: Routledge.

Williams, M. C. (2003). Words, images, enemies: Securitization and international politics. *International Studies Quarterly*, *47*(4), 511–531. doi: 10.1046/j.0020-8833.2003.00277.x

8. Appendix I: Honours literature review

This section of the thesis will explore the academic literature on climate change in relation to Africa, the African Union, and the African Union during international climate conferences, concluding with recommendations for future research.

8.1 Africa and climate change

As has become clear from this thesis, a great deal of research has been done on the European Union in relation to climate change and the securitisation of the issue. However, for developing countries, the effects of climate change will be much more disastrous than the effects that countries in the European Union will experience (Vogler, 2017, p. 395). While developing countries in Africa have contributed relatively little to global warming, they will most likely bear the highest costs (Collier, Conway & Venables, 2008, pp. 337-338; Ruppel, 2013, pp. 411-412; Oluborode Jegede, 2020, p. 56). Research has shown that African countries are particularly vulnerable to the impacts of climate change for three interrelated, mutually reinforcing reasons. Firstly, the climate in Africa is more likely to be severely affected by climate change than other continents, as it is warming faster than the global average (International Institute for Sustainable Development [IISD], 2011, p. 21). Secondly, Africa's major economic sectors are very sensitive to changes in the climate (IISD, 2011, p. 21). Lastly, low levels of human development and the higher occurrence of other stress factors (for instance conflict and disease) limit the adaptive capacity of African countries (IISD, 2011, p. 21).

Scholars literature on climate change in relation to Africa often stresses that climate change can cause food and water supplies to become less reliable, and to increase the frequency of extreme weather events, which can result in an overall decline of the quality of life in the continent (Brown, Hammill & McLeman, 2007, p. 1148). Additionally, a wide range of research has explored the relation between climate change and violent conflict, finding that climate change is a contributing factor to violent conflict, in which state vulnerability acts as a moderating factor (Brown et al., 2007, pp. 1148-1149; Hendrix & Salehyan, 2012, p. 35; Jones, Mattiacci & Braumoeller, 2017, p. 335). Approaches combatting climate change and strengthening government institutions are therefore perceived most effective in preventing violent conflict (Jones et al., 2017, p. 335). This is where the African Union can be of major importance, as its mandate includes defending the sovereignty and territorial integrity of individual African states, while, at the same time achieving greater unity and solidarity, which

is essential for combating the transnational issue of climate change (Organisation of African Unity, 2000, Art. 3).

8.2 The African Union and climate change

The African Union, being the major organisation representing most African countries, is particularly relevant in regard to climate change. As a transnational issue affecting countries around the world, international organisations like the AU, reaching beyond state borders, are particularly well-suited to tackle climate change. Moreover, the African Union is even more suited to tackle the issue as its mandate clearly stipulates that it has the mandate to act upon the issue.

A first reason why the African Union's mandate illustrates that it should act on climate change has to do with the African Charter on Human and Peoples' Rights, more commonly known as the Banjul Charter. Coming into being under the Organisation of African Unity, the predecessor of the contemporary African Union, the Banjul Charter is the regional human rights instrument of Africa, intended to promote and protect human rights and basic freedoms on the African continent (Scholtz, 2015, p. 402). Scholars researching climate change and the African Union are particularly interested in article 22 and 24 of the Charter. These articles stipulate that all people have the right to economic, social and cultural development and that states have a duty to ensure this right, and that all people have the right to a "general satisfactory environment favourable to their development" (African Union, 1981, art. 22, 24). Since, the African Union has made the promotion and protection of human rights essential parts of its mandate and agenda (Biegon & Killander, 2010, p. 212), it gives the African Union a clear mandate to try to combat climate change. Acknowledging this, the African Union has explicitly linked article 22 and 24 of the Banjul Charter to the issue of climate change, for instance in a statement ahead of the UN Biodiversity Conference (Chapman, 2010, p. 37).

Secondly, the African Union also has a clear mandate to tackle the issue of climate change considering its own Constitutive Act. Article 3 and 6 of the Constitutive Act of the African Union state that member-states should promote sustainable development, peace, security and stability in Africa, and undertake humanitarian action and disaster management (Organisation of African Unity, 2000, art. 3, 6; Ruppel, 2013, pp. 414-415). This clearly establishes the African Union's mandate to act upon climate change.

Acknowledging the mandate of the African Union to act upon climate change, academic literature has generally focused on what the AU has done in this regard. One of the successes in this respect has been a Science and Technology Consolidated plan to combat climate change,

which was implemented by the African Union in 2005 (Chirisa, Mumba & Dirwai, 2014, p. 7). Additionally, the AU has proposed initiatives seeking to minimise the disproportionate burden of climate change on poor and marginalised communities (Ruppel, 2013, p. 442; Chirisa et al., 2014, p. 7). However, in the academic literature, the African Union is generally seen as unsuccessful in regard to protecting human rights and tackling climate change (Sesay, 2008, p. 8). Strydom (2015, p. 49), argues in this respect that AU initiatives aimed at protecting the environment and promoting sustainable development should not be seen as separate cases where the AU has not successfully been able to act. This is in line with general consensus of the scholarly literature on the topic, which recognises that many of the AU's policies are not implemented, with estimates of only 15 per cent of policies being implemented, many on which with necessary external support (Okumu, 2009, p. 107; Strydom, 2015, pp. 49-50; Pease, 2018, p. 33; Tieku, 2019, p. 15). However, a gap in the academic literature exists in regard to accounting for why many of the AU's policies, for instance on climate change, are not implemented by member-states. Acknowledging this gap, Strydom (2015, pp. 49-50) argues that it is unclear how actions by the AU relate to those on the regional level, additionally stating that an obscurity exists on how initiatives are translated into national policies. All in all, it would be very valuable to look at why the AU's policies do not get implemented and how policies on incredibly pressing issues such as climate change, for which the AU has a clear mandate to act, can ultimately be implemented.

8.3 The African Union during international climate conferences

Research on the African Union during international conferences is primarily concerned with how well the AU is able to maintain an 'African position' by speaking with 'one voice'. Research has found that the Climate Change Conference in Copenhagen in 2009 was the first case where the African Union successfully held a united position (Welz, 2013, p. 437). Two years later, during the COP 17 (Conference of the Parties) in Durban in 2011, Africa was still largely able to maintain a common position, notwithstanding pressure from developed countries (Ruppel, 2013, p. 419).

However, scholars have argued that, since then, differing priorities among African countries jeopardise the capacity of the African Union to have an influence during international climate conferences (Hoste, 2010, p. 6; Ruppel, 2013, p. 419). Competing interests and approaches between African countries and a lack of will among African political leaders to address these differences negatively impacts the African Union's ability to uphold a common position on climate change and tackle the issue effectively (Murithi, 2010, p. 193; Masters,

2011, p. 266). Particularly interesting in this regard is that not just the African countries cause these competing interests and approaches, but regional economic communities and international organisations within the African Union also form a part of the cause (Masters, 2011, p. 266). This heterogeneity is detrimental for the African Union's position in international climate change negotiations, as a common position is essential to realise adaptive capacity to climate change (Scholtz, 2010, p. 25).

An explanation for this heterogeneity could be that the threats climate change poses to Africa are predominantly brought to the African Union's attention by different actors outside of the Union (Williams, 2008, p. 11). However, scholars have argued for various differing causes of this heterogeneity. Welz (2013, p. 437) argues that the persistence of heterogeneity in the African Union is due to the reluctance of its member states to give up some of their sovereignty. Conversely, Nelson (2016, p. 125) argues that the lack of an African common position is mostly due to Africa's regional powers having different interests, such as Nigeria being primarily interested in energy production, whereas South Africa is mostly concerned with consumption. Additionally, Nelson (2016, pp. 125-126) argues that climate change cooperation between African countries has often less to do with climate change, and more with other policy goals such as maintaining global influence or increasing domestic legitimacy. Additionally, it is not clear whether one unified 'African position' is sufficient to achieve an influence in international climate conferences. Illustrating why this might not be the case, Welz (2013, p. 437) argues that for the 2009 Copenhagen summit, the African position turned into reality only because the African position was supported by the European states, creating a window of opportunity for the African Union to influence international governance. Confronted with these differing scholarly perspectives on why the heterogeneity between African countries persists and why an 'African position' has not sustained, it would be worthwhile to understand how climate change gets on the agenda of the African Union, how the Union aims to reach a collective position on the issue, and why this position has been unsuccessful to a large extent.

8.5 Conclusion

This honours literature review has endeavoured to shed light on the academic literature on the African Union in relation to climate change. Three main academic strands were discussed regarding the topic. First, scholarly literature in relation to climate change and the African continent was discussed. This strand of research has generally concluded that the African continent will most likely bear the highest costs of climate change. Furthermore, research in this strand has particularly focused on one of the effects of climate change, namely the increased

possibility of violent conflict. The scholarly literature has, in this regard, illustrated that the African Union can be of major importance. However, relatively little research has been conducted on this. It would, therefore, be interesting for further research to explore whether and how the African Union has sought to minimise conflict as a result of climate change on the continent.

The second strand of research that was discussed had a narrower emphasis in that its focus was specifically on the African Union and climate change. It was illustrated that a gap in the scholarly literature exists regarding the lack of implementation of the African Union's policies by its member-states. Through the discussion, it was made clear that future research in this strand should look into why the African Union's policies have a low degree of implementation, particularly considering the clear mandate that the African Union has in this regard. Third, for future research examining the role of the African Union during international climate conferences it would be interesting to apply different theoretical approaches towards the topic. This would be interesting as the African Union is arguably the intergovernmental organisation most affected by climate change, and applying a securitisation framework to the topic could further knowledge on how the African Union tries to securitise climate change during international conferences, and whether the organisation has done this successfully. Additionally, it would be interesting to compare the approach the African Union adopts to combat climate change to approaches by other intergovernmental organisations, such as the EU, the Association of Southeast Asian Nations (ASEAN), or the Organisation of American States (OAS). This comparison would be interesting as it could contrast the environment being perceived as a human right for the African Union with perceptions of other intergovernmental organisations.

8.6 Bibliography honours literature review

African Union. (1981). *African Charter on Human and Peoples' Rights*. Retrieved from www.achpr.org/legalinstruments/detail?id=49#:~:text=The%20African%20Charter%20on%20Human,freedoms%20in%20the%20African%20continent.

Biegon, J., & Killander, M. (2010). Human rights developments in the African Union during 2009. *African Human Rights Law Journal*, *15*(2), 212–232.

Brown, O., Hammill, A., & McLeman, R. (2007). Climate change as the 'new' security threat: Implications for Africa. *International Affairs*, *83*(6), 1141–1154. doi: 10.1111/j.1468-2346.2007.00678.x

Chapman, M. (2010). Climate change and the regional human rights systems. *Sustainable Development Law & Policy*, *10*(2), 37–61.

Chirisa, I. E., Mumba, A., & Dirwai, S. O. (2014). A review of the evolution and trajectory of the African union as an instrument of regional integration. *SpringerPlus*, *3*(1), 1–8. doi: 10.1186/2193-1801-3-101

Collier, P., Conway, G., & Venables, T. (2008). Climate change and Africa. *Oxford Review of Economic Policy*, *24*(2), 337–353. doi: 10.1093/oxrep/grn019

Hendrix, C. S., & Salehyan, I. (2012). Climate change, rainfall, and social conflict in Africa. *Journal of Peace Research*, *49*(1), 35–50. doi: 10.1177/0022343311426165

Hoste, J. H. (2010). Where was united Africa in the climate change negotiations? *Africa Policy Brief*, 1–7.

International Institute for Sustainable Development. (2011). *Africa transformation-ready: The strategic application of information and communication technologies to climate change adaptation in Africa*. Retrieved from www.academia.edu/download/34970296/ClimateChange_Fullreport.pdf

Jones, B. T., Mattiacci, E., & Braumoeller, B. F. (2017). Food scarcity and state vulnerability: Unpacking the link between climate variability and violent unrest. *Journal of Peace Research*, *54*(3), 335–350. doi: 10.1177/0022343316684662

Masters, L. (2011). Sustaining the African common position on climate change: International organisations, Africa and COP17. *South African Journal of International Affairs*, *18*(2), 257–269. doi: 10.1080/10220461.2011.588825

Murithi, T. (2010). The African Union as an international actor. In J. Mangala (Ed.), *Africa and the New World Era: From Humanitarianism to a Strategic View* (1st ed., pp. 193–205). London, United Kingdom: Palgrave Macmillan.

Nelson, M. B. (2016). Africa's regional powers and climate change negotiations. *Global Environmental Politics*, *16*(2), 110–129. doi: 10.1162/glep_a_00348

Okumu, W. (2009). The African Union: Pitfalls and prospects for uniting Africa. *Journal of International Affairs*, *62*(2), 93–111.

Oluborode Jegede, A. (2020). Should a human right to a safe climate be recognized under the AU human rights system? In M. Addaney & O. A. Jegede (Eds.), *Human Rights and the Environment under African Union Law* (1st ed., pp. 55–79). London, United Kingdom: Palgrave Macmillan.

Organisation of African Unity. (2000). *Constitutive act of the African Union*. Retrieved from www.au.int/sites/default/files/treaties/7758-treaty-0021_-_constitutive_act_of_the_african_union_e.pdf

Pease, K. S. (2018). *International organizations: Perspectives on global governance* (6th ed.). Abingdon, United Kingdom: Routledge.

Ruppel, O. C. (2013). Climate change law and policy positions in the African Union and related developments in selected African countries. In O. C. Ruppel, C. Roschmann, & K. Ruppel-Schlichting (Eds.), *Climate Change: Intersections of law and cooperative global climate governance : challenges in the Anthropocene* (pp. 411–448). Baden-Baden, Germany: Nomos.

Scholtz, W. (2010). The promotion of regional environmental security and Africa's common position on climate change. *African Human Rights Law Journal*, *10*(1), 1–25.

Scholtz, W. (2015). Human rights and the environment in the African Union context. In A. Grear & L. J. Kotzé (Eds.), *Research Handbook on Human Rights and the Environment* (pp. 401–420). Cheltenham, United Kingdom: Edward Elgar Publishing.

Sesay, A. (2008). *The African Union: Forward march or about face-turn?* (3rd ed.). Uppsala, Sweden: Uppsala University.

Strydom, H. (2015). Introduction to regional environmental law of the African Union. In W. Scholtz & J. Verschuuren (Eds.), *Regional Environmental Law: Transregional Comparative Lessons in Pursuit of Sustainable Development* (pp. 21–50). Northampton, United States: Edward Elgar Publishing.

Tieku, T. K. (2019). The African Union: Successes and failures. *Oxford Research Encyclopedia of Politics*. doi: 10.1093/acrefore/9780190228637.013.703

Vogler, J. (2017). Environmental issues. In J. Baylis, S. Smith, & P. Owens (Eds.), *The Globalization of World Politics: An Introduction to International Relations* (7th ed., pp. 385–401). Oxford, United Kingdom: Oxford University Press.

Williams, P. D. (2008). Regional arrangements and transnational security challenges: The African Union and the limits of securitization theory. *African Security, 1*(1), 2–23. doi: 10.1080/19362200802285732

Welz, M. (2013). The African Union beyond Africa: Explaining the limited impact of Africa's continental organization on global governance. *Global Governance, 19*(3), 425–441. doi: 10.1163/19426720-01903005

9. Appendix II: Coding frame

The coding frame, consisting of five categories and a short description is presented below. For the coding frame, the thesis draws on the literature by Buzan et al. (1998), Detraz and Betsill (2009), McDonald (2013), Diez et al. (2016), and Dalby (2018),

Table 3. Coding scheme of security narratives

Category	Description	Indicators
Cooperative security	**Cooperative security** includes references to how states or international organisations have to work together to effectively tackle the threats climate change poses.	It includes framings of climate change as a global threat in need of a global solution. It also includes economical issues, in relation to climate change for example the working to more sustainable modes of production.
Environmental security	**Environmental security** includes references to maintaining the integrity of natural ecosystems on which humanity is dependent.	The loss of biodiversity, deforestation, desertification, depletion of the ozone layer, and various forms of pollution, keeping the planet's temperature close to what humanity has so far known, and also references to resource management strategies, such as preventing the depletion of natural resources.
Human security	**Human security** focuses on vulnerable people and the provision of the essential needs for people to thrive in their particular places.	This category is very human-centred and thus also entails population growth and consumption beyond the earth's carrying capacity, but also epidemics, famines, poverty, and bad health conditions more generally. It also includes human migrations, from the perspective of these refugees, and not being framed as a security risk to other states.

Global security	**Global security** revolves around the avoidance of major international wars as a result of climate change.	It also includes references to war-related environmental damage on a global scale and global violence related to environmental degradation.
National security	**National security** focuses on the state, sovereignty, and the military control of national territory.	It includes all references to 'threats' revolving around the state, for instance migration threatening state borders.

10. Appendix III: Colour-coded debate fragments

This section contains the colour-coded fragments of European Parliamentary debates from 2005 to 2011 that were used as the data for this thesis.

Table 4. List of colour-coded debate fragments in chronological order

Source	Colour-coded debate fragment
European Parliament (2005a)	Climate policy matters not only to the European Union, but also to the world as a whole, and attention to that policy is for that reason a global task. for our children's sake, to take the necessary steps at long last towards making this continent safe where CO2 emissions are concerned. which clearly defines the issues of climate change and also suggests some answers to this problem, which will, or might ultimately, be a threat to humanity. It confirmed that, if the essential target of the United Nations Framework Convention on Climate Change is to be met, the increase in the global annual average surface temperature must not be more than 2ºC above pre-industrial levels. It also welcomed the Commission communication entitled 'Winning the battle against global climate change' and in that connection clearly emphasised the need to give fresh impetus to international negotiations by exploring options for a post-2012 regime and ensuring the widest possible cooperation of all countries. , if we are to be able to combat climate change more effectively, including in the transport sector. As we said earlier, the Commission is preparing a communication for next June on the question of air transport, the contribution of which to greenhouse gas emissions is increasing constantly. We are examining three alternative solutions: tax, inclusion in the gas trading system or user charges. I of course agree with you, however, that the dialogue with the United States is incredibly important because, without its active participation, the work on climate change can never be properly effective The emissions from these will completely overshadow what we do in Europe It will be much more difficult to stay within the two-degree increase in temperature established by the EU as an objective and to avoid dangerous climate change.

global warming is materialising much quicker than anticipated. We are faced with the dual task of adapting to climate change and, at the same time, of keeping it to an absolute minimum. In the light of this enormous challenge Climate change derives from a two-fold shortage: the physical scarcity of energy resources

and the inability of the ecosystem to absorb the flow of waste. It must be pointed out, in actual fact, that, as extreme events become worse, climate change creates considerable threats for the region, which must be tackled immediately.

It is not only the issue of energy production that is at stake, but also the consumption habits of our society.

we will still not be able to stop the earth from warming up by two degrees and the sea level from rising by half a metre. I happen to come from the Netherlands, the Low Countries, so you can imagine that this causes me some considerable anxiety. If the sea level increases by half a metre, large parts of my country will flood if nothing is done about it. The coastline as we know it will disappear. The Hague will disappear into the sea and with it, the embassies of all the countries represented here today, our government buildings, the International Court of Justice, the Yugoslavia Tribunal and the Palace of our Queen. We may, as a party, be republican, but we do not want to achieve our goals by submerging the royal palace.

Fortunately, the Netherlands has the technical capacity to prevent this from happening, but many other countries do not. The disappearance of whole swathes of coastline is inevitable. We should prepare for that eventuality

Mr President, during the last hundred years, the world has experienced an increase in temperature of approximately 0.6 degrees. The UN's Intergovernmental Panel on Climate Change (IPCC) has noted that this change mainly affects the world's poor people. I wish to emphasise this, because we in this House too often see global problems from a one-sided European perspective. The reasons why it is mainly poor people who experience the effects of global climate change are many. They partly have to do with the fact that these countries' economies are often dominated by climate-sensitive industries, especially agriculture. They also have few resources with which to adapt to, and protect themselves against, various changes, for example rising

sea levels or reduced rainfall. There are also too few resources for preventive healthcare. It is thus difficult to eradicate the risk of climate-related diseases, such as malaria, from breaking out.

The world's rich countries need to coordinate their common efforts in combating climate change and to work in particular with preventive measures. My party believes that the EU should work on cross-border environmental issues. Climate change is among these. I thus support constructive and well thought-out proposals by the EU in this area. At the same time, I wish to emphasise that the UN Climate Convention has been ratified by 189 parties. Thus, we cannot operate unilaterally through European institutions. We need instead also to coordinate our measures within the frameworks of other international organisations and to be alert to the UN's competent bodies and the World Energy Council (WEC).

On the other hand, it is widely agreed that, since the beginning of the last century, the average increase in the planet's temperature has been one of the causes of changes to the ecosystem – we only have to mention the increase in desertification by way of example

President, several of the scientific studies carried out recently show that climate change is probably proceeding even more quickly than we thought and that greater reductions in the quantity of greenhouse gases in the atmosphere are also needed in order to prevent this change. This means that the demands upon us are increasing and that the measures we need to take to reduce emissions by 60 to 80% by 2050 – which is a realistic figure – will require quite different energy and transport policies than those we have at present. We have, then, really only just begun.

We have to admit that Kyoto has now reached an impasse, as the global front is inadequate, partly because there are no limits for developing countries, and partly because the major polluters are on the outside. That makes Kyoto ineffective and causes the distortion of competition and carbon leakage. Even if we did all we could in the EU, it has been estimated that in future decades the proportion of emissions from the 25 EU countries will drop to below 10%, while developing countries will increase their share to over half of all emissions. Unless the front is made wider, the efforts of the EU will come to nothing.

	We must try to work with all those who realise the importance of the problem, that the problem is a global one and needs a global solution. Mrs President, there is now almost universal acceptance that climate change is a serious and an urgent problem. The IPCC predicts that global temperatures may rise by as much as 5.8°C by the year 2100
European Parliament (2005b)	According to one insurance company, the estimated economic costs of global warming could double to USD 150 billion each year in the next 10 years, hitting insurers with USD 30-40 billion worth of claims. There is good evidence that the 2003 European heatwave was influenced by global warming and that, as Members will recall, resulted in 26 000 premature deaths, as well as costing USD 13.5 billion. Those events and their associated price tags bring very close to home the reality of what unchecked climate change would mean for us. It is clear that the scale of a climate change problem is enormous and that it is pressing, and that is why the UK decided to make climate change a priority for our presidencies of both the G8 and the EU. But despite all this work and effort, it is clear that emissions in the EU are not being reduced as quickly as we want and that urgent action is needed in all sectors, at both national and EU level. So I applaud the Commission's decision to launch a new phase of the European climate change programme to look at what more can be done – both of the EU and of the G8 – to carry on this work, keeping climate change high on their agendas and tackling the major threats it poses to our economies, our society and our environment. We have all been worried by the recent succession of disasters. We had a serious drought on the Iberian Peninsular this summer, we had floods during the summer in central Europe, we had a series of hurricanes – Katrina, Rita, Wilma – and other smaller-scale disasters. 2005 has already achieved an unprecedented record, in that 2005 was the year with the highest number of named tropical cyclones since records began. Although specific weather phenomena cannot be connected directly to climate change, the increase in the phenomena of droughts and floods and the more

serious and more frequent hurricanes or tropical storms nonetheless confirm scientific warnings about climate change.

The earth has probably never in its history heated up as quickly as it has over the last 30 years. The 1990s were the hottest decade and nine of the ten hottest years in history fell between 1995 and 2004, with the hottest in 1998. Scientists are expressing fears that 2005 may ultimately be the hottest year in history.

As we all know, when the planet heats up, the sea also heats up and when the temperature of the sea exceeds 26°C, then a tropical cyclone is likely to develop. The temperature at the surface of the sea has increased at global level over the last 100 years to 0.6%, which means that we shall probably have much more frequent and stronger cyclones in future.

Nonetheless, rather than determining the extent to which hurricane Katrina or other weather phenomena were caused by human activity, it is more important that we draw lessons from these weather phenomena, so that we can win the battle against climate change.

Climate change is one of the most serious threats we face. I wish to emphasise that it can no longer be seen as an environmental problem. A warmer climate is a less stable climate, entailing a threat to just about every sector of our society, a threat that must be designated as one of our security problems. It is a security threat not only to the EU and its Member States but also, of course, to many poor countries in the tropics.

In actual fact, climate change is, in our opinion, a real concern for civilisation. That is why our committee was keen to highlight that the combined effects of climate change, of worldwide demographic changes and of economic globalisation open the doors to an unprecedented period of instability in the history of humankind. There are indeed grounds for fearing that, in this context, global warming will increase the divide between the developed world and countries whose development is lagging behind. There is, unfortunately, no doubt that these countries will be affected most by the impacts of climate change. This is particularly the case as regards the small island states, which are vulnerable in more ways than one, above all in the face of hurricanes and of rising sea levels.

Madam President, it is clear that climate change is so intense and so close to us that it is no longer an intellectual problem or a problem affecting certain more sensitive groups which had raised the issue

I also believe that we must seek strategies for compensating for climate change and determining the extent to which it can be alleviated. I believe that we must review our policy on drought and desertification in the Mediterranean and deal with the suffering and deterioration of the eco-system and of our animal resources and fauna.

Madam President, we have seen the faces of the victims of the New Orleans hurricane and flood. Global warming does not mean actual warming in every single part of the world. It means a growing number of disasters, for instance weather irregularities, huge losses of lives and valuables. We simply use too much fossil energy. If the developing nations, including almost three billion people in China and India, follow the American way of consumption then we will burn up our planet. That is why on behalf of the Socialist Group I welcome Mr Wijkman's brave report.

Madam President, a decade ago there was much speculation about climate change, but today it is very much a reality as we see the future unfolding before our eyes. The Arctic people see it in disappearing Arctic ice; the shantytown dwellers of Latin America and southern Asia see it in lethal storms and floods; Europeans see it in disappearing glaciers, forest fires and fatal heatwaves. In Brazil this year, for example, while hurricanes thousands of miles away battered the United States and the Caribbean with water and wind, residents of a small fishing town deep in the Amazon region watched the lake on which they depend for food and transportation shrivel away in a year which saw the region's worst drought in four decades: the result of warmer ocean water, which has also been blamed for one of the most violent hurricane seasons on record in the Gulf of Mexico.

I remain deeply concerned that the United States continues to choose to tackle the climate change issue through unilateral activities. Climate change needs to be dealt with as a global problem. If carbon dioxide is not reduced, the Arctic ice cover will disappear. That will affect the quality of life in particular of those

living in coastal regions and island communities. That is a scientific fact, not a passionate policy comment on my part.

What is a fact, and what surprises many people, is that because of the level of greenhouse gases already in the atmosphere, we are already committed to a significant amount of global warming and rising sea levels. If we became a perfect pupil now in terms of greenhouse gas emissions, we would still suffer from past pollution, but the longer we wait to tackle greenhouse gas emissions in a serious manner, the more entrenched the commitment is.

Temperature rises have already been noted. The half-a-degree temperature rise is similar to that observed at the end to the twentieth century. However, what is more alarming is the projected sea-level rise, which is more than twice the three-inch rise that occurred during the latter part of the previous century. Those numbers do not take into account the fresh water from melting ice sheets and glaciers, which could at least double the sea-level rise caused by thermal expansion alone.

Scientists have claimed that water temperatures in the North Atlantic and the Gulf of Mexico have been as much as 3.6 degrees higher than normal this year. That has helped to feed the hurricanes that have devastated the US Gulf coast and the Caribbean. It has also helped to generate the warmer-than-normal air currents that have poured into the Amazon basin and prevented rain clouds from forming. Greenpeace has warned that this year's experience could be a sign of things to come if practices such as deforestation and emissions of heat-trapping gases into the atmosphere do not stop.

Europe was among the first regions in the world to record the climatic changes that are the consequence of dangerous global climatic shifts. Summers have become warmer, winters have become rainy, river flows have dwindled, soil humidity has diminished and we have recorded more floods, as well as extreme droughts and hurricanes.

There is no doubt that these changes spring directly from human activity, mainly in the developed countries that are mostly responsible for high emissions of greenhouse gases. The largest polluters include the European Union. Each year, disasters cause significant economic loss, loss of life and an increased incidence of the many diseases linked to environmental pollution. Joint action by the

biggest polluters – China, the United States, the European Union and India – in the fight against climatic changes is essential.

As a result of climatic changes, Europe will be exposed to diseases that are not indigenous to this continent, being more typical of geographical zones lying further to the south. Global warming may increase the incidence of infectious diseases transmitted by arthropods, such as mosquitoes spreading malaria or certain viral inflammations of the brain.

Mr President, ladies and gentlemen, the greenhouse effect is the greatest problem that we have to face, because it involves a structural change in the conditions needed for life. Our ability to address this problem has to be an essential element in what we do.

The main responsibility for environmental destruction lies with the industrialised countries. The liberal lifestyles they enjoy and the consumer behaviour they promote lie at the root of this disaster, which has unimaginable consequences for health and for the future of the earth in general.

Economic losses due to weather-related natural catastrophes have increased six-fold since the 1960s.

The earth's temperature is rising at an alarming rate. The EU 15 will not meet their current Kyoto targets on CO_2 emissions reduction and nothing will be done about that.

We have the huge problem of the climate, which knows no borders. We cannot put up barbed wire fences. So we need to convince the Americans if we want to avoid disastrous results.

We must act immediately in order to respond to this threat, which is undoubtedly one of the most serious in the history of humankind, with a growing number of floods, droughts and hurricanes, a melting ice cap, our melting glaciers and perhaps, one day, the development of certain diseases.

It would be naïve to claim that had the USA fulfilled the Kyoto Protocol requirements it would not have been devastated by the Hurricanes Katrina and Wilma. But Nature did strike back at precisely the state that harms it most. Unless the international community takes urgent and drastic measures to stop the further spread of global warming, our planet will turn into a hurricane bearing, fire and water- spitting monster.

	Mr President, Minister, Commissioner, as a great Indian leader once said, the earth does not belong to us, we borrowed it from our children. If we lose the battle against climate change, what kind of earth are we going to leave our children? The diagnosis has been made. The need for action is simply illustrated by the natural phenomena going on all around us, be it the fires raging through Southern Europe, the hurricanes in America or, indeed, the floods in the Austrian Tyrol, from which I come. There has been much emphasis on what are usually known in the jargon as 'co-benefits'. Some speakers emphasised the damage caused by air pollution by the same gases that are contributing to climate change, while others emphasised that, as we tackle climate change, we will derive other potential health benefits from the reduction in the use of those gases.
European Parliament (2006a)	However, we cannot rest on our laurels. Climate change requires urgent action and concerns us all. Drastic cuts in emissions of greenhouse gases will be needed if we are to stabilise and then reduce concentrations of these gases in our planet's atmosphere The multiplier effect is going to mean that the pace of climate change is going to accelerate and there is little we can do. When you read the European Environment Agency reports that glaciers in Switzerland retreated by 10% in one year alone, in 2003, you think that maybe he has a point, that we are just not realising what is happening. Here we are in this fantastic palace of energy use, debating what might be the end of civilisation. Mr President, ladies and gentlemen, there is little time for this debate and so also to prevent climate change. Researchers are extremely worried about the rate at which climate change is progressing; they are worried about what sort of world their children, our children, will be living in. They say that the human race has 10 years at most to bring emissions right down: or, as Chris Davies said, perhaps it is already too late. recognises climate change as one of the most significant threats to global security. The appalling disasters that occurred in 2005 showed us what nature is capable of and may well be no more than the first indications of what we can reckon with happening frequently in the future.

	Even though they have sustained enormous damage, the USA and Australia are not prepared to implement the Kyoto Protocol once and for all. Six countries are responsible for almost 50% of worldwide greenhouse gas production, and we must step up the pressure on them to a substantial degree. Europe has witnessed climate change in the past two years on a scale not seen for 5 000 years. The four hottest years on record were 1998, 2002, 2003 and 2004. If we continue at this rate, without effective action, global warming will cause ice-sheets to melt in the north and the spread of deserts in the south It is time we realised that it is climate chaos we are facing. There is no negotiating with Mother Earth. We are guests in her house and we must follow her rules. That is why we must quickly limit emissions. We still have a long way to go and I agree that already today we are experiencing climate change. There has already been a 0.7° Celsius rise in the temperature and many of the phenomena we see today are due to climate change. As I said earlier, we are seeing various weather phenomena, such as hurricanes, prolonged droughts or floods in other parts of the world which are in keeping with scientists' predictions relating to climate change. Not all these incidents may be connected or we may not be able to connect them directly to climate change, but they come within scientists' general predictions. Of course, the phenomenon we are seeing today, the melting of the glaciers, both in the Alps and the Arctic Circle, the possible change in direction of the Gulf Stream, the rise in sea levels and a series of other phenomena will have serious repercussions on life, health, the environment and the ecosystems of the whole of mankind, which will be all the greater in the very poor countries, which do not have the means to deal with these consequences
European Parliament (2006b)	In Nairobi, the European Union will justifiably continue to maintain that the fight against climate change and the millennium development goals, are not only mutually compatible but also mutually dependent. The climate is changing quickly, more quickly than expected. Ice caps are melting, sea levels are rising and we will soon reach the point of no return. Mr President, ladies and gentlemen, the message that we are receiving from the world of science is becoming ever more serious: the more recent the study, the more serious the message from science is on accelerated climate change. We are

	approaching a threshold, past which major disasters are unavoidable. That is what British Foreign Minister Margaret Beckett said and she went on to say we are heading for climate chaos. At the same time the economic analyses show that very ambitious emission reductions are very reasonable in terms of cost and they will of course be a lot cheaper than letting climate change run riot. Mr President, there is no doubt in anyone's mind that climate change is for real. The average temperature is rising every year, and this year, unfortunately, was no exception. We all know and agree that we need to move from one-sided EU climate politics to a global front, as only truly global action will lead to efficient emission reductions. Therefore, for the sake of the climate and to really win the battle, let us be honest when analysing the problems arising from the Kyoto Protocol, as well as from the EU ETS preparing for Kyoto. Mr President, Commissioner, climate change is no longer speculation, it is a fact. As is the prospect of a countdown to unprecedented catastrophe for further generations if the present unacceptable situation continues. The Commission recognises the need for the European Union to maintain its leading role in not only international but also domestic efforts to fight climate change. I agree that it is important to assist developing countries to adapt to the adverse effects of climate change and to help them in deploying sustainable technologies.
European Parliament (2007a)	The risks of climate change far outweigh the costs of doing something about it. Following several natural events, notably the warm winter we are experiencing this year, there is a lively public debate about the threat of climate change. The urgency and scale of the climate change challenge requires Europe to further reduce its greenhouse gas emissions and convince its partners around the globe to do likewise. So in this way we shall show that we practice what we preach and we shall persuade them to follow in a global agreement, because climate change is a global threat and needs a global response. I would like to start by saying that we in the Council, in preparing the latest climate change conference, have arrived at common positions with the

Commission and your House as regards the essential issues, strategies and responses to this global challenge.

Humanity faces two challenges, and they are both truly great ones. The first great challenge to the human race is the question as to how the world – and its growing population – are to be provided with sufficient energy. Today, this planet of ours is home to 6.5 billion people, and there will, at some point, be over 9 billion of them. Today, 1.4 billion people live in industrialised regions, and the population of the industrialised nations on this planet will, in a few years and decades, reach 4 billion

If, over the next fifty years, we want to consume energy and raw materials in the same way as we have done over the last half-century, we would need two planets in order to supply the human race with enough of these resources. The first question, then, that we have to answer if we want to make headway in the international negotiations on climate protection, is just how we can manage to secure the supply of energy, not only for ourselves, but also for the developing and emerging countries that are striving for economic growth in order to improve the conditions under which their people live.

If Europeans, and the other industrialised nations, do not manage to offer these countries technological answers as to how they can give their people economic growth, social security and prosperity without at the same time ruining the climate, then these countries will not join us in the search for ways of dealing with climate change.

It is already apparent to us what the consequences of that are. In my own country, Germany, the last glacier will have ceased to be by 2020.

A few months ago, we launched a new rescue vessel to rescue people from shipwrecks in the North Sea. It is almost 50 metres in length. Ten or 20 years ago, a length of between 20 and 30 metres would have been quite sufficient. These are the first indications of climate change in a country that is affected by it only to a relatively small extent.

We know that there will, in Germany, be more flooding, but also more recorded droughts. We, though, are a relatively wealthy and secure country. We hear about rather more serious problems when we talk to our counterparts from Spain and Portugal, countries that live in fear of real desertification, of droughts

amounting to more periods of water shortages, and things become even more unsettling when we take a look and see what global warming is already doing in Africa.

On the African continent today, there are already more refugees as a result of climate change than of war and civil warfare. The sort of movements of refugees that we see on the north African coast across the Mediterranean from Europe are just a hint of what is in store for us if global warming

and the destruction of living conditions in a continent like Africa, are not stopped in their tracks

and global warming begins to have an effect on the glaciers of the Himalayas, the source of 40% of Asia's fresh water

I ask you to imagine what sort of threats the world faces when these reserves of drinkable water in Asia start to disappear; we will face the prospect of wars being fought not only for oil, but also, conceivably, of wars and civil wars being fought to gain possession of reservoirs of water.

We are talking, then, about a real threat to the human race, but we must first succeed in getting these debates about the challenges to humanity out from the specialist arenas and into the forums of world leaders.

this is one of the greatest challenges that the human race has to contend with, actually has the effect of making us focus our political action on it and prioritising it as part of our day-to-day work.

The atmosphere is a dumping ground; although, nobody sees it, one does not smell it – at least not every day – and thank heaven disasters are not a daily occurrence. There is a quite considerable likelihood of the fact of this dump's invisibility not reminding us, on a daily basis, of the need for action, and if you tell the people, your electorate, that we want to limit the temperature increase on our planet to 2 degrees, many of them will look at you in amazement and say, 'Two degrees? That is not really very much, and it is actually very pleasant if it does not get quite so cold in Northern Europe'. In other words, it is difficult to communicate the fact that a mere two or three degrees is the difference between our present-day temperatures and the Ice Age several thousand years ago.

	It has to be spelled out that climate change is something that is already happening and that, in essence, it is our children and grandchildren who are going to be affected by it. my 18-year old daughter will pay a heavy price if we fail to make use of the next 10 to 15 years in order to bring about real change in global warming or to stop it altogether. Madam President, Commissioner, Mr President-in-Office of the Council, ladies and gentlemen, access to energy and the handling of climate change constitute the two great challenges that the human race will have to face in the twenty-first century. the economic damage done by uncontrolled climate change is comparable, economically speaking, only with that done in the course of the Second World War. In my electoral district, we have a tangible example of this, one that people talk about, for we experienced the storm 'Kyrill', which caused thousands of people to sustain serious losses, since my electoral district was at its epicentre. Although climate change cannot be blamed for every storm, the researchers are pretty certain that the accumulation of extreme meteorological occurrences can no longer be overlooked. We now also have the chance to get something done about this at the international level, for in the USA, for example, the debate has undergone fundamental change in the aftermath of Katrina. After what has happened over the last few months, we have a far greater chance than in the past of doing something about it together, so, realistically, nobody should take it for granted that we will get nowhere; instead, we should do everything possible to actually get an international agreement in place. to help overcome this challenge to civilisation If we were to continue at this rate, we would do the planet intolerable damage not only for future generations but for our children's generation, too. So much for the bad news, which certainly is bad.
European Parliament (2007b)	The climate problem is so extensive that it will be necessary to keep it on the agenda for decades to come.

Finally, ladies and gentlemen, while I am not being Sinophobic – please believe me when I say that – I would ask once again: is there any sense in all of our unilateral efforts regarding sustainability when, in one year, China and the Asian economic tigers emit as much climate-changing gas into the atmosphere as is produced in ten years by EU countries?

We might perhaps also agree that the reduction of CO2 output is a task for the future

it is far cheaper to adopt solid climate policy than to pay for subsequent costs for adjusting to global warming.

Mr President, scientists have been sounding the alarm for years. We are talking not about a future danger but about a present threat.

My opinion is that the lives of all of us and of our children weigh and count more than the automobile industry

Such an approach certainly does not amount to caring for the planet in the interests of our children.

firstly, there is climate change itself and the public desire to tackle it;

secondly, international involvement in the fight against climate change;

thirdly, the innovation required for a change in production methods and the use of energy; and lastly

our countries' adaptation to the inevitable effects of climate change.

According to one estimate, the cost of doing nothing could be as much as 20% of GNP globally. If we take action now, however, and halt climate change at two degrees, the cost will be a fraction of that.

The European Parliament must embark on a direct dialogue with the newly elected American Congress. Instead of just following the American debate in the media, it is our responsibility to take action.

the more than 40 deaths caused by the Kyrill storm are a sad portent of what is in store for us in the near future

That is why the fight against climate change, which requires the help of all countries, needs none other than the most advanced countries to lead the way.

By way of a final remark, we should not attempt to address the climate problem unilaterally, which would mean that measures would lead to other environmental damage. The production and incineration of biofuels must be

environmentally friendly, and that is where the problem was with palm oil. Environmental clangers of this kind must be prevented in future.

one is to reduce CO2 emissions and the other is to ensure that we can meet the changes that follow climate change.

You should do that not in order to solve the greenhouse effect, as some say, but in order not to make things worse.

It is a global problem requiring a global response from both governments and citizens

by not using their cars and by walking more, which is healthy and protects the environment.

thinking ahead to 2030-2050, will fossil fuels have run out? Will the ITER project have kept its promise on fusion? Given the huge growth of China and India, will energy resources be sufficient?

the earth is most likely to warm up by three degrees this century. If that happens it will mean that Greenland's ice sheet will inevitably melt and sea levels will rise by at least seven metres. It will mean that the map of Europe will be redrawn. This has to be prevented.

We have to take very urgent practical action to stop the earth from warming up any more than two degrees, which is the EU target.

that is not to go above two degrees

) I agree that climate change may have catastrophic consequences for the world – and with it for Europe. If over the next ten years we do not radically turn around our current practice, if we do not change our current way of life, then this may cause enormous economic and ecological damage.

the extent of climate change and its possible catastrophic impact

The melting of Greenland's ice sheet, the Arctic ice and the Siberian permafrost have noticeably reduced the amount of ice on the Earth, which will lead to a dangerous increase in the sea level around the globe.

We all know that it is time to act, since the situation in the area of climate change is indeed serious.

with people talking about storms being caused by changes in climate, even though anyone who reads intelligent meteorology knows that that is not how it works.

parallel to climate change, we are also affected by the depletion of fisheries, huge and rapid deforestation, and water scarcity in many parts of the world. We have to face the fact that the lifestyles that we have developed in a world with 8 to 9 billion people goes beyond the carrying capacity of the globe, and that is why we have to take a systematic approach that brings us back onto a normal, sustainable path.

the added value of our sovereign states sharing power to address the global problem of climate change, about which they are all seriously concerned.

I should like to start by thanking everyone who took the floor today for their very positive speeches, which illustrate the extent to which the members of the European Parliament are fully aware of the problem of climate change and this is, of course, also a reflection of public opinion, which has also become very aware of the problem.

We must safeguard the credibility of the European Union in the leading role which it plays at global level in addressing climate change and we must send the strongest possible message to our partners in both the developed and the developing world

If we are convinced that climate change really is a challenge to the human race, why, then, can we not, in the national parliaments, get those Members who speak up in debates about health service reform, the labour market, foreign policy and peacemaking, to get worked up about climate change?

Climate change is one of the biggest challenges facing humanity, and it is one where isolated and patchy responses by individual countries would be entirely inadequate.

Global warming is not a figment of the imagination of a few publicity-seeking scientists and politicians; it is a reality that we must now come to terms with.

We are speaking as though the debate is over, and the threat of catastrophic global warming is real. Yet there are many climatologists who take a different view. They believe that current changes are within the normal historic range, and that predictions of future warming are exaggerated and alarmist

Nevertheless, whatever our view on climate change, energy security demands that we reduce our dependence on imported fossil fuels. We can no longer rely on Russia, the Middle East, Nigeria and Venezuela for energy.

European Parliament (2008a)	As everyone now knows, we are engaged in a very tough battle to do our best to mitigate global warming, and we are discussing a legislative package which should enable us to take a major step towards this goal. We are nevertheless aware that the effects of climate change are already being felt in many parts of the world, especially in the poorest areas as well as in large parts of our own continent and the European Union The European Union must set about developing cooperation and financial, technical and scientific collaboration with the countries most in need of help, countries less well-equipped to confront the sometimes devastating effects of global warming. We need only think of the Pacific islands: we held a hearing which was attended by representatives from some of those countries, and they explained to us how precarious their situation already is now. The extreme diversity of situations in Europe means that no single policy can be drawn up. We have the southern areas of Europe, of course, and also the Alpine belt, where the effects are very different and very significant. The various committees must therefore establish a very close one-to-one relationship with regional authorities. for limiting the effects of unavoidable climate change. This change has already happened. It will continue to take place in the coming years, despite measures to reduce carbon dioxide emissions, We should remember that beyond Europe, that is to say, in Asia, Africa and Oceania, the effects of climate change are very considerable indeed and bear no comparison to what we are experiencing on our continent. Secondly, we need to develop technology and ways of adapting that will reduce the impact of the climate changes taking place at present and enable us to adjust and adapt to what is happening to the climate. A further reason for acting in this way is so that we can then share our experiences with poorer and developing countries. Our aim therefore has to be to ensure that the whole world commits to preventing climate change. This must come about in Poznań and Copenhagen, and it is our responsibility as the European Union to ensure that it does. the problems are all beginning to take shape, with great clarity and speed. This is especially true of environmental, economic and energy problems, on which the development and growth of both the European and the international

economy are modelled. This development appears to have continued aimlessly, wasting natural and human resources, with the clear aim of accumulating capital.

Commissioner, this is essential because tackling the problem of adaptation is politically costly; there must be no gap between the policies we announce and the budget we allocate. If there is, we will not be trusted either by the citizens of today or by future generations.

We are talking here specifically about adaptation, but we should not in fact forget the need to ensure that the resources for adaptation derive partly from the emissions trading system. Since it is the poorest countries that bear the greatest burden of climate change, we must see to it that the proceeds from the emissions trading system are placed first and foremost at the disposal of developing countries. I believe we can do so by applying a principle of general equity, namely by handing out free rights of emission, to be established essentially on the basis of an equity principle: 'one person, one right of emission'.

Furthermore, climate change in our own countries means more intense rainfall, longer dry spells and less snowfall. We must therefore practise integrated land management to protect the soil, and here I would emphasise the importance of what Mr Sacconi said, because in circumstances of widespread water shortages, rain must be kept where it falls so that it can water the lower slopes. In addition, longer dry spells increase the likelihood of fires, which we can address by thinning out woodland to minimise the fire load. However, we must act on all fronts at once in a consistent and determined fashion.

climate change really is one of the most serious problems facing mankind in this day and age.

The major challenge posed by climate change and the major challenge of securing a reliable, affordable and sustainable energy supply in Europe and other parts of the world can be mastered using the same tools.

I believe that even if we were able to keep global warming to within two degrees, that would still mean a scenario of extreme climatic variations in Europe

with consequences for the local economy,

the environment

and the population

Hence we cannot adopt an approach based solely on cost-benefit analysis, because in Europe, as in the rest of the world, poor people will be those hardest hit: it is they who live in the areas most at risk, and generally they lack information and do not have the wherewithal to react to a rapidly changing environment.

The creation of the Committee on Climate Change was determined by the direct impact climate changes have on the planet, endangering the existence of humankind in general.

We should be very careful, we may have no reason to do this anymore. Our health, economy, ecosystems, our way of life, Europe as we know it is in great danger.

Moreover, it is absolutely necessary for the European institutions to propose, as soon as possible, a clear strategy to be negotiated at an international level. It is useless to take action only in Europe. We should be the promoters of combating climate change at a global level.

We also know that climate change will have an impact on people's living conditions. We have already had experience of heatwaves and the heavy toll of human life that results from them in different Member States. There may be a greater incidence of epidemic disease too, with these diseases occurring in places where they are at present unknown. It is all this that our healthcare systems must be able to respond to, with everyone having guaranteed access to healthcare services.

Hitherto we have talked a great deal in economic terms in the European debate, but climate change will alter the whole environment of our lives.

A subject to which we have not so far devoted sufficient discussion is health. The World Health Organisation has indicated that 60 000 deaths last year can be linked to climate change. It calls for an entirely different approach to social planning, entirely different technology and huge investment. It may frighten many people, but we must make this investment in order to cope with climate change and technical development and in order to hold our own in competition with other parts of the world.

There can be no decisions on transport which do not take climate change into account. There can be no discussion of public health or education without addressing climate change.

One of the most important matters we have begun to deal with is of course water, in Europe and at global level. We have received visits in the committee from representatives of the Maldives, a country where the highest point is just over two metres above current sea level. The Maldives will partially disappear if we cannot solve the climate problem.

It is the poorest countries which will suffer most. I would therefore like to issue a challenge to the Commission: the Solidarity Fund must be boosted and given more resources, and aid from the EU must also focus on climate questions. Otherwise we cannot help the rest of the world, and moreover, we shall not get a good agreement out of the negotiations in Copenhagen in 2009. Thank you.

We should link countering climate change with limiting changes in the global market that are detrimental to us. I am referring, in particular, to the meteoric rise in the price of gas and oil, of which we are the largest importer.

We must also consider the scenario regarding the consequences of increasing CO_2. It is a fact that trees and plants flourished when the CO_2 content of the atmosphere was much greater.

These are fundamental questions, Mr Dimas, that you are asking us to raise today, because this is not just a matter for the Commission or for the Temporary Committee on Climate Change. It is a matter that affects the whole world today and every one of us.

Mr President, ladies and gentlemen, I shall focus on two points. Even today, billions of people have no access to water and hundreds of millions are dying as a result. Climate change is bound to worsen the situation. The price will be paid mainly by continents such as Africa, which are already enduring terrible conditions and, even though they pollute less, are harder hit by climate change.

The right to water must become a top priority for adaptation policies. I say 'right' because this right has still not yet been sanctioned. International documents refer to the 'need for water', whilst real military and economic wars are being waged with a view to appropriating water and turning it into a commodity. It is therefore necessary to sanction the right to water and pursue

policies enabling that right to be implemented. In this sense it may be useful – and here I am addressing the Commissioner – to draw up a water protocol for inclusion in the text of the post-Kyoto agreements.

Along with water goes soil. We have a European directive in need of approval. We must combat desertification and promote the role of the soil as an agent of climate balance: that is the thrust of our directive. Good agricultural practice, unlike for example the production of biodiesel, can guarantee both food output and carbon capture. Adaptation, therefore, does not mean surrendering to climate change but intervening to combat it.

President, the EU is proud of its commitment to the IPCC's recommendations on how to combat global warming by persuading its Member States to inject massive funding into carbon-emission control projects.

agriculture and forestry are among the economic sectors hardest hit by climate change and therefore have a strong interest in efficient climate protection measures, also at global level. All states – particularly developing countries – need to be involved in the regime for the post-Kyoto period. Binding targets for developing countries are essential, but emissions must be reduced within a reasonable timeframe.

Climate changes are more and more obvious and humankind should change its behavior, giving more attention to environmental protection

Europe is already dealing with very high temperatures during summer, droughts followed by heavy rains and floods, violent storms and desertification of vast regions, especially in the Southern and Eastern regions.

Romania has not been exempt from the effects of climate change either. In recent years, we have seen devastating floods, hot days, violent storms, the desertification of regions in the Southern and Eastern part of the country, a decrease in precipitation. All these have led to loss of human lives, important material damage and a decrease in agricultural production.

Europe needs to take firm action today in order to reduce the effects of climate change. Europe needs to take action for a better water management, protection against floods, wastewater purification, protection of coastal areas, increase in

energy efficiency, reduction of greenhouse gas emissions, adopting less polluting agriculture, adopting ecological transport, stopping deforestation.

Special attention must be given to areas under desertification. Europe should examine the possibility of investing in an irrigation system that would assist the Member States in danger of diminishing their agricultural production following desertification in building or improving their irrigation systems.

Mr President, Commissioner, ladies and gentlemen, the effects of climate change are evident and are only going to become more pronounced. We now know that despite the implementation of an ambitious policy to combat climate change we can only stabilise the phenomenon, and we therefore have to adapt to its consequences.

Adapting to climate change will require ambitious financing in many areas, and in my view the most important of these are: health, agriculture, water protection, housing and population migrations. To this end, our policy on support for European research should give priority to these areas.

Combating greenhouse gas emissions and adapting to climate change should become compulsory conditions for the allocation of European funding

This is a global problem; we thus need global responses. The European Union must make every effort to establish at global level a policy on adapting to climate change. This policy should take account of the growing number of natural disasters when drawing up health and agricultural plans. This policy should focus above all on the most vulnerable countries, i.e. the poorest countries. Just as we can hope to benefit from the fruit of European research, we must ensure that the developing countries benefit from it too. We should transfer our technologies to third countries without necessarily expecting any recompense.

, which are destroying the Amazon forests, wrecking the global climate, doubling food prices and thus putting pressure on the poorer sections of society

Mr President, climate change is a challenge to us all. We must remember that we share this world not just with people today, but with those who come in the future.

Mr President, ladies and gentlemen, the fight against global warming is not just Europe's fight: it must become the whole planet's battle. Otherwise all our great plans will be meaningless and the Europeans alone will make enormous efforts for results that will remain a drop in the ocean.

What I want, above all, is for consideration to be given to specific geographical characteristics, and one area in particular, which will of no surprise to you: the island regions. The beautiful Greek islands – like the Balearics, which I represent – may be at risk in the future from any climate changes that occur. In my view, the Commission cannot recognise solely the specific nature of the outermost regions; it must also incorporate the insularity factor and, of course, mountainous and coastal regions.

The studies by the Spanish Oceanography Institute, and many others, highlight the fact that the Mediterranean Sea is undergoing an accelerated warming process and a rise in the water level. This could have significant repercussions on the coastline, especially the beaches, which would be flooded, with the corresponding impact on tourism, our main source of income.

In the example I was talking about, the Balearics, temperatures have risen notably in recent years, which is cause for concern.

The Green Paper must also include a commitment to support the regions requiring substantial investment to counteract the effects of climate change.

because whatever we do about climate change we also need to invest in adapting societies to cope with rising sea and river levels, or conversely less water and drought. All these have consequences for security, water consumption, the soil, agriculture, but also, clearly, for public health.

Some areas must prepare themselves for severe drought and higher temperatures. Irrigation systems and clean desalination units are the solution in this case. Other areas must deal with water as an inconvenience and must invest in dyke reinforcement. It is for the Member States themselves to make plans, to analyse the impact of climate change and to get ready.

There are, however, three important points. First of all, solidarity is very necessary: some countries are carried along by others while some have more

strength than others. It goes without saying that the European Union also has a common responsibility.

Thirdly, solidarity must of course also apply to the developing countries. Many African and Asian countries have themselves hardly contributed to climate change but are still negatively affected by it. Sound and solid sources of financing must be found, and here to the obvious thing is to look at the ETS revenue.

Mr President, Commissioner, ladies and gentlemen, climate change is on the way; that is a scientifically proven fact. The IPCC's Fourth Assessment Report states quite clearly that no region of Europe will be spared its effects.

It is important to keep increases in temperature under 2°C. However, even global warming of less than 2°C would have negative economic and environmental consequences for certain regions of Europe.

There will be drought on the one hand, and too much water on the other hand, with rising sea levels. The latter development is something that I must highlight as a representative of the Netherlands. Half of our land is below sea level. Marine dykes must be higher, but there are also many more technological challenges to consider

Some countries, mainly Nordic, have already developed a long-term strategy for dealing with climate change without any encouragement from Brussels, foreseeing actions to be taken in reaction to climate change: protecting coastal areas, taking measures against coastal flooding, building specially designed houses. The adoption of the White Paper will encourage other countries to follow their example.

The EU countries with sea and ocean borders – and there are 22 of them – should meanwhile study the experience of the Netherlands in resisting the sea.

At the recent meeting of the EU Council it was declared that the issue of climate change would be of the greatest importance in the preparation of the EU's prevention and protection policy. Conflicts and wars to gain areas still suitable to live in as well as those providing water and food should be prevented before it is too late. This particularly concerns the poorest countries of the world, which

have contributed the least to climate change. Those that have progressed at the expense of others should pay back their debt without delay.

the effect of climate change on biodiversity

nd the havoc it is already wreaking in the developing world,

Generous funding for technology transfer, adaptation and mitigation measures and others will be a measure of our acceptance of our historic responsibility towards third countries, those most likely to bear the brunt of climate change, including adverse weather, desertification, coastal flooding and serious water shortages.

I would therefore ask the following question: are we in the process of devising a twin-speed policy in Europe? Would it not be better to coordinate our position everywhere, in the knowledge that the climate change policy is a policy on the redistribution of resources? It is a fundamental justice policy that must be applied at global level.

It is our main objective to have an international agreement to fight climate change, and to adapt to changing climatic conditions, in which all the countries of the world will participate and especially the United States and other big emitters, because then the fight against climate change will be effective. Of course, the European Union's efforts will not be enough, but we cannot hope to have an international agreement if we do not take active leadership regarding this.

Last week a report from the World Health Organisation underlined the impact on health caused by climatic conditions and changes in climate, and NASA warned us that climate change is happening faster than we thought. Therefore, relying on what science is telling us, we have to act.

I heard various examples of what is happening right now, for example in the important issue of water. We have legislation – the Water Framework Directive – which deals with this very precious and scarce resource, but we also adopted very recently a communication on water scarcity and droughts, because this is becoming a very important and urgent problem that we have to deal with.

As a supranational organisation, the European Union has a special role in allowing the relevant preparation and coordination of its Members. Acts done at EU level should be ambitious and in keeping with the scientific reality of our

	times. Forward planning can help us deal with the most adverse effects of climate change. The EU should be generous in its external relations when dealing with developing countries and help them adapt to climate change – a phenomenon for which they are not responsible, but one from which they will suffer disproportionately. the number of droughts has increased, while the amount of rainfall has decreased, with a major impact on agricultural production. The most spectacular manifestation of extreme climatic events is probably the record-level floods that have occurred in the Carpathian Basin over the past decade. We firmly believe that flood protection is one of the areas where prompt and vigorous action is needed. The European Union and the Member States need to pay more attention to ensuring that the increasingly infrequent but all the more torrential rains do not place a strain on our rivers all at once. With this in mind, possibilities for natural water storage must be explored in areas of flat, open countryside, while at the same time reducing flood risk by planting forests in hilly areas. Let us hope that the decision-makers do not wait until the next time we hear appalling news of floods before opting to take action. The air quality in Beijing is so poor that scientists have calculated that it shortens the life expectancy of the inhabitants of that city by seven years. The poor air quality in Brussels shortens life expectancy by seven months. A poor environment is therefore a health risk.
European Parliament (2008b)	We have sufficient information to state that the target of limiting the global average temperature increase to not more than 2°C above pre-industrial levels in future is important. report states that there is no doubt that the climate system is warming up, and that the increase in the average global temperature over the last fifty years has most probably been caused by the anthropogenic concentration of greenhouse gases Almost all of us agree that the increase in world temperature ought to be restricted to two degrees above pre-industrial levels, while bearing in mind that

we actually ought to be aiming for an increase of less than two degrees. The debate on climate change cannot, however, be boiled down to a battle of statistics. When we talk about the climate, we mention the melting of the Arctic ice cap, desertification, global warming, displacement of animal species, and especially phenomena that could have catastrophic consequences in terms of human displacement.

This is a major challenge for mankind as a whole. The regions hardest hit will be the poorest countries in Africa, Asia and Central and Latin America, where environmental migration is envisaged. A new kind of refugee is set to emerge with the onset of extreme climate conditions. They will no longer be political refugees or economic migrants; they will be climate refugees. There is also a risk of a food crisis since there will be less cultivatable land. When supplies of drinking water become more scarce, tensions will rise, and wars could break out in a struggle for control of resources.

Today, we know that we have to solve energy and climate problems but also combat hunger in the world

global greenhouse gas emissions are growing faster than ever before, up by a quarter since 1990. Some scientists say CO_2 concentrations have already gone too far. All agree the window of opportunity open to us to stabilise emissions and limit the rise in temperature to two degrees above pre-industrial levels will close within seven years.

We must accept the difficulties that we are facing; the scientific evidence is now overwhelming. Climate change is a serious global threat. It is going to cost us. Are we seriously willing to sacrifice not only our climate and planet, but also our economies? Continued inaction will eventually cost us up to one fifth of our annual gross domestic product, but real action will mean a 1% spend.

Are we also willing to subject our climate to the point of no return? Already scientists inform us that the last decade was the warmest on record and that 2007 was one of the top 10 warmest years.

We note from the report that global emissions increased by 70% between 1970 and 2004, that the last decade was the warmest ever and that we face several tipping-points, for example the melting of the Greenland ice sheet. We therefore call for a 60-80% reduction in the EU's emissions by 2050.

Personally, however, I fear that all our goodwill will not be enough to resolve the serious problems which we face. I am thinking especially of the catastrophic outlook predicted by climate change for problems which are already very difficult, such as poverty, public health and access to natural resources, chief among which is water, and I believe that, once the first step on this journey of discovery into this phenomenon has been taken, namely the drafting of this initial report on scientific evidence, we will in all likelihood be choosing to accept a mission impossible.

Firstly, almost everyone now at least agrees that global warming is a fact, even if some corner of our planet happens to be temporarily colder than in the past. Due amongst other reasons to the IPCC report, it now seems to be accepted that global warming exists. Consequently, it is no longer so important to refer to further indications of the approaching Apocalypse linked to rising temperatures. On the other hand, explaining and proving the reason for the rise in temperatures is certainly necessary.

More than two thirds of the world's surface is covered by oceans and three quarters of the world's mega-cities are by the sea. More than 97% of the planet's water is contained in the oceans and fish supply the highest percentage of the world's protein consumed by humans, on which 3.5 billion people depend for their primary source of food. As man-made greenhouse gas emissions rise, the scientific prediction is that dramatic changes such as warmer oceans, melting of the poles, rising sea levels and ocean acidification will pose severe threats to marine ecosystems and the fishing community.

In Hungary, for example, the groundwater level on the Hungarian Plain between the rivers Danube and Tisza has fallen by 3-4 metres over the past 30-40 years; serious desertification has occurred, meaning that scientists have taken measurements and found that desertification is 50% due to climate change and 50% due to harmful human activity.

Climate change already affects the European Union. In recent years, Romania, for instance, has been affected by drought, floods and hot weather. Some areas in Romania's South and Southeast region have started to turn into desert. The Union has undertaken an important role in the fight against climate change both as regards the reduction of causes and the adjustment to climate change.

	Climate change has serious implications, not only for ecosystems, but also for the economy, public health, water and food security, as well as migration. The resolution reminds us of the dangers involved in uncontrolled climate change, which will affect human society in a variety of ways and will seriously impact our economies and cultural traditions. The resolution quite rightly emphasises how important it is to avoid major disruptions to the climate, such as the drying-up of the Amazon tributaries and the collapse of large volumes of ice at both Poles. I think it is equally important to highlight the likely consequences of climate change in terms of international security, food and water shortages, and disputes over control of resources and over movements of migrants. Pressure is steadily increasing on the international community because of environmental emergencies resulting from extreme weather conditions and violent conflicts caused by climate change. The recent food price crisis is the most palpable example to date of what may happen: reduced harvests in many parts of the world are caused by extreme weather conditions. Unfortunately, this situation does not appear to be temporary or exceptional; it is set to become integral and recurrent and cannot be controlled without drastic changes to agricultural policy and farming practice. As Sir Nicholas Stern has pointed out, the economic and social costs of climate change will be catastrophic. Either we start acting now on the basis of international cooperation to limit further damage and avert the disasters that are predicted and which will impact with full force on the world's poorest people first, or we continue along the road to destruction.
European Parliament (2009a)	the EU will demonstrate that its commitment, as well as its leadership, in the global fight against climate change is as strong as ever. With this set of measures, there is also reason for optimism. Greenhouse gases can be reduced, which contributes to innovation, economic growth, better energy supply, better food production, more employment and a more stable climate. I am indebted to all fellow Members who have made a contribution to this

It is the fact that human population is growing at unprecedented and unsustainable levels. In the lifetimes of many of us here, population on this planet will have trebled. It continues to grow at the rate of 200 000 every day: 80 million a year.

Why does China need a new coal-fired power station every week? Because its population has more than doubled in 50 years, it is continuing to grow fast, demand for energy grows with it, and Chinese people want what we have in the West, and they have every right to that. The Minister is flying to India today. Population growth is even faster there and again they are turning to coal for energy.

But this planet has finite resources. We need to slow and reverse our population growth. We must do so entirely through non-coercive means, and we must never arrogantly forget that those of us in the developed countries contribute vastly more to climate change than those in developing countries.

The UN population fund says that 380 women in the world become pregnant every minute of the day, and half of that number do not plan to do so. Contraception must be available for all. Women must have control over their reproductive lives: it is so preferable to the alternative of unsafe abortion.

Medical resources need improvements so that women can safely delay giving birth until a later age, but above all the issue must be on the political agenda. Our refusal to place it there is the greatest folly. Families everywhere should be talking about this. Governments should be setting targets for population stability or reduction. Admitting the central importance of population growth is key to addressing it, and we will not succeed in tackling climate change or achieving sustainable development if we fail to do so.

Allow me also to remind you that the meat industry is, in fact, the primary cause of the destruction of the Amazon rainforest as a result of the creation both of grazing land for animals and land for the production of feed. A large proportion of this feed is exported to Europe as soya. This is not sustainable.

We need to ask ourselves whether the situation with all these forms of transport is sustainable.

To reduce or prevent the negative effects of climate change, tough action is needed across a wide area.

This report is a further expression of what has become a permanent concern of the European Union, namely climate change and its consequences.

Climate change, as I have said many times, is an urgent and serious matter and requires targeted and effective instruments.

What we need is global consensus, and for this we must have something to offer, above all to developing countries. At present the equal conditions that will convince people in developing countries to espouse this policy are still lacking. It is somewhat too Eurocentric and somewhat too compartmentalised as well.

the EU is still doing too little, too late.

I do not expect to be popular for saying so, but we need to be measuring the EU's progress not against what other countries are doing, but against what needs to be done. Against that measure we are still failing.

We are failing in not bringing sufficient ambition to this debate. The latest science tells us we need to be reducing emissions by around 9% year on year. The targets set out in this report and in the EU's climate package are simply not ambitious enough.

We are failing in not bringing enough urgency to this debate. If we are not well on the way to a zero-carbon economy in the next eight to ten years we will have lost the opportunity to have halted the worst of climate change.

So I commend to you the idea of adopting a green new deal for Europe, a way of addressing both the economic crisis and the climate crisis, with a major investment in energy efficiency and renewables, to create millions of new green jobs in Europe.

President, I want to raise a voice of concern and caution in this frenzied debate about climate change, particularly as it could affect food production. We are told that the world population will spiral to nine billion by 2050, thus food production must correspondingly increase. Yet within this proposed climate change package we have emission-reduction demands which, if met, would reduce food production when we need it most.

, we can no longer hide behind the United States' refusal to cooperate. With the Obama presidency, we have the opportunity to stop exchanging words and start exchanging ideas.

The Commissioner has referred to the urgent need to talk to the low-income countries in the developing world. They will be devastated, but they did not cause this problem.

Islands will sink beneath the waves; malaria, respiratory disease, skin cancer and eyesight problems are already happening. Devastation will come to agriculture. They must take action, but they need our help.

No measures are proposed with regard to the protection of land and soil. As regards water resources, there is a whole package of proposals in the World Water Forum that could have been included. When it comes to energy efficiency, there are options that have not been included in areas where we have the opportunity for decision-making in Parliament. Alternative fuels are also treated with far too much restraint.

In the very important area of health, the report focuses on the collection of facts and the control of mosquito bites, where, instead, we need major strategic decisions in Europe to cope with the effects of climate change on human health. climate change and its consequences are here and there is no time for further delay.

As a doctor I am interested particularly in health-related changes such as increases in diseases typically associated with tropical areas.

As these diseases are rare in our part of the world, we can presume that they will take a much more dramatic course.

The situation in agriculture and in securing sufficient food for human consumption will also become very serious.

In conclusion, our target must be at least a 30% decrease in CO_2 emissions by 2020 as part of a post-2012 global agreement, with at least an 80% decrease by 2050 – and that is the more important target.

between jobs and tackling climate change, and between getting out of the economic crisis and tackling climate change. Because, if we do not make that link and we do not get the economic recovery programmes right, people will start to say – and they are already saying it – that this climate change stuff was

all very well when there was economic growth but we cannot afford to make all these investments now.

Their countries will become bankrupt unless we invest in renewable energies and unless we reduce our energy dependency on insecure sources of fossil fuels

The developing world did not create the conditions that are leading us toward irreversible damage, but they are the ones suffering the most. Europe must act as a pioneer and take charge of realistic, necessary measures on an international basis.

saving the world, setting a course of action that will require the cooperation and sacrifice of everyone everywhere, a task which, to be successful, will also require the cooperation of the winds, water and the sun

The European Commission estimates that an annual investment of EUR 175 billion is required to fight global warming.

We must face up to the consequences of climate change; there is no question about that. It is only the means for doing so chosen by the report that I cannot fully support. Firstly, it is right that the EU should take the first steps to protect the climate, but it is not beneficial to rush on ahead alone without the involvement of partners. Europe leading the way is not enough to convince the rest of the world. A more viable approach must involve the industrial nations and at least China, India and Brazil, otherwise Europe's economy will remain unfairly burdened without there being any measureable effects on global CO_2 emissions

rainforests, which are being deforested

What I am particularly concerned about is not CO_2 emissions per se, but the positive feedback mechanisms that are now happening in the planetary system, like the acidification of the oceans, reduced albedo and the possible leaking of methane from thawing tundra. All these factors will accelerate warming. We can control emissions but we cannot control these factors.

This means, by the way, that the 2°C target has to be revisited and that greenhouse gas concentrations have to be lowered, rather than continuing to increase. That is why some of us advocate very strongly the 350 ppm target. This dimension of the problem is referred to in the report but only in passing. I

would have liked it to be at the core of the report. My guess is that, only a few years from now, the feedbacks I mentioned will be at the centre of the debate.

I would just like to end by emphasising the advances made in introducing adaptations regarding water supply and drought as well as in sustainable mobility that I think we have

The fight against climate change cannot be waged by Europe alone. We must also get other continents and countries on board. The committee has also done a good job in this regard, because we, as Parliament, have for the first time become visible in matters of climate diplomacy and I would like to emphasise this once again in this House.

Water plays a central role in climate change. We must realize that the consequences of climate change on the water regime may cause a domino effect and may impact on many sectors of the economy. The ever-increasing worldwide problems with water require a coordinated water management policy from the Member States and the introduction of environmental principles into an integrated management of water resources.

We must initiate programmes for creating surface storage facilities for rain water in forested, agricultural and urban areas through legislative instruments and through non-investment and investment measures which will make a fundamental contribution to rainwater storage in the countryside. Until now rainwater has been regarded as waste water which had to be disposed of as quickly as possible. The new approach for water is based on the principle that rainwater is the key to life. I am delighted that it will be introduced by an expert group of Czech and Slovak scientists.

our whole plan to fight climate change is a response to the serious economic crisis we are now experiencing. The decline in energy resources, the need for energy security, deforestation, the suffocation of our great cities which are home to the majority of the population, the necessity, therefore, to use sustainable transport, the endless famine throughout the world and the need to nourish the planet; everything supports the solutions proposed to fight climate change.

Combating climate change is not only an obligation so that we can guarantee the future for the generations to come,

but it is also an opportunity for reviving the global economy.

we must deal with our cities and other difficult areas. Ultimately, this is perhaps the most difficult task.

Agriculture is particularly affected by climate change, as its products are produced in the open air. We think of droughts and desertification, as we are seeing in southern Italy, for example, or of other extreme weather phenomena, such as unexpected rain and hail showers or floods, which often affect the livelihoods of our farmers.

In Romania, we have faced falls in production in recent years due to external causes such as floods, drought and bird flu, with problems of an economic nature coming on top of this over the last few months. During the current financial crisis, it is going to be increasingly difficult for us to cover losses triggered by floods and drought using the state budget.

I also believe that, faced with a challenge of this magnitude, we need to give priority to investments in clean technologies and renewable energy

One of the most serious long-term consequences of climate change is the decrease in fresh water sources and the increasing scarcity of clean drinking water. It is no exaggeration to say that water will be the most important strategic asset of the 21st century. Europe's environmental protection policy must therefore be applied more rigorously than it has been until now to protect water tables, prevent water and soil pollution and support appropriate handling of natural and artificial water habitats.

Alternating periods of flood and drought, as well as extreme weather conditions, demand better management of rainwater. There is no such thing as superfluous water, only poorly managed water. In the next parliamentary cycle and the new budget, the European Union must ensure that significant funds are available for flood prevention, protection of water tables, increasing urban bodies of fresh water and waste water treatment programmes. Hungary's water resources are excellent and Hungarian hydraulic engineers have been doing a wonderful job for nearly 200 years. Therefore, I am certain that our country will play an active and constructive role in drafting a unified European water policy.

Agriculture and Romanian forestry can play an important role in combating climate change, whose impact has been strongly felt in recent years, especially through flooding, high temperatures and prolonged droughts. These natural

	phenomena affect not only agricultural and forest productivity, but also precious habitats and ecosystems. Agriculture and forestry are expected to continue making an important contribution to the battle against the effects caused by climate change through forestation, with the aim of absorbing and retaining greenhouse gases, and the use of biomass as a renewable source of energy Reforestation and measures preventing desertification can also produce spectacular results in the medium term This strategy must be based on the principle of solidarity aimed at reaching a balance between rich countries and developing countries, which need assistance in reducing their vulnerability to the adverse effects of climate change. The signs of global warming are evident in poverty, shortages of food products and limited energy resources. It is a well-known fact that oil is no longer a sufficiently powerful source of energy to meet the level of demand, which is estimated to grow by at least 60% by 2030. Bearing in mind that this sector provides the food resources for the world's population, sustainable management of soil and water resources, combined with protection of forests and biodiversity, will need to feature on the agenda of the long-term strategy for tackling the effects of global warming.
European Parliament (2009b)	Only together can we mobilise the knowledge and skills needed to prevent climate change and the irreparable damage to ecosystems. There is, however, no time to lose: global emissions have to be reduced within the next 10 years. The ministers and prime ministers that convene at Copenhagen must take their responsibility seriously and make decisions to ensure that the temperature of the earth will not rise by more than two degrees. The decision must embrace all the main questions, it must be binding, and it must include a binding timetable for the drafting of an eventual international agreement. Some people are saying 'go 10% further. I would very much like to do that, but it requires a global agreement. Otherwise, this extra 10% from the EU would be eaten up by only two years of emissions increases in China, and we will still not have saved the climate. That is why the global agreement is so important and

why Parliament's role is so vital, as this is an important political basis on which to build further.

Mr President, a couple of months back, I was in Greenland. I visited a small town there called Ilulissat, and just north of Ilulissat is a glacier. This glacier is now melting and it is moving at two metres an hour – two metres an hour! You can see it with the naked eye. You can hear it, because when a huge chunk of ice falls off, it sounds like a clap of thunder. The meltwater coming from this glacier each day is equal to the annual consumption of a whole city the size of New York. Per day! That is an indicator of the urgency of what we are dealing with. And that is before the effects of climate change really hit us.

Even the floods which are devastating parts of my region in Cockermouth and Workington, where we have had the highest rainfall on record, are nothing special; they cannot be specifically attributed to climate change, although they are in line with the science.

Mr President, in many parts of the world the consequences of climate change are visible. The most recent calculations assume a global temperature rise of up to 4° C by 2060, and up to 10° C in the Arctic. It is primarily Europe's soot emissions that are responsible for the significantly faster melting of the ice in the Arctic – they are borne there by the wind.

This leads me to mention what I consider to be a flaw in our resolution, namely the lack of consideration given to the impact of climate change on people's health. It has a crucial impact if we listen to the appeals and the warnings of the WHO.

Madam President, there is a new film on climate change called *The Age of Stupid*. It is set in 2055 and focuses on a lone survivor of climate catastrophe. I am haunted by some words from that film, where the actor, looking back to 2009 – looking back to now – says 'Why, knowing what they knew then, didn't they act when there was still time?'

Madam President, we are at a crucial turning point for the planet. The scientific community, via the IPCC, is calling on the European Union and the Member States to commit to a 40% reduction in greenhouse gas emissions by 2020 compared with 1990 values.

For we are talking about combating climate change – change which could lead to a true ecological disaster. We are talking about the common future of the planet – the future of all of us.

Earlier I heard a number of my fellow Members understate the extent of this global warming. It must be remembered, however, that many hundreds of millions of human beings in the world are going to become what one might call climate change casualties as a result of this increase. Copenhagen must halt this temperature increase.

Madam President, Mr Carlgren, Mr Dimas, ladies and gentlemen, this morning I would like to talk about an 84-year-old missionary, Father Ettore Turrini, who has spent 59 years in the north-west of the Amazon. He has always fought to protect the indigenous people and their forest from anyone seeking to destroy them in the name of short-term interests.

In travelling round the forest, Father Ettore has had seven air accidents, but he has carried on and has obtained tens of thousands of signatures through his activities, which he will submit to President Lula, to many ministers and to the Italian President, Mr Napolitano. He has been indefatigable.

We met last Sunday and I told him that I fully shared his position, but that perhaps the world is coming to its senses and reaching the conclusion that these forests are essential as the world's lung, for the local climate and also for carbon capture and storage.

Mr Verheugen's ominous forecast that we will only be exporting pollution and importing unemployment might come true.

We must combat desertification, climate upheaval and violent natural phenomena if we wish to halve extreme poverty, combat epidemics and ensure that everyone has access to water, which is an essential requirement.

Madam President, ladies and gentlemen, the protection of indigenous peoples plays a vital role in the fight against climate change. When it comes to the environment, poverty and health, they are the first to suffer from climate change Above and beyond deforestation and the mining industry, they suffer from the false solutions proposed by industrialised countries. Biofuels are not a clean

alternative. They damage the land of indigenous peoples, with the result that they have to relocate.

Madam President, climate protection and sustainable development are subjects that – we are supposed to believe – affect us all. Yet there can be no satisfactory progress without close collaboration, in particular, amongst the global players. While the United States and China refuse to lay down common, binding greenhouse gas reduction targets, all that can be adopted in Copenhagen – as the UN's chief climate official tellingly observed – are morally binding resolutions, in other words, toothless ones.

The ambitious targets are good and, ultimately, the efforts that we are making today will also represent a contribution to tomorrow with a view to the consequences and the future damage in the form of migration, damage to coastal areas or also, perhaps, in the form of stable regions becoming more unstable as a result of climate change.

It is also because, when we talk about the two degree target, we are conscious of the fact that it is the highest level we need to achieve. We know that we are, in fact, already seeing unacceptable results today. Talk to the government of the Maldives, for example, that recently held its cabinet meeting under water to show the consequences that will be very nearly unavoidable in some parts of the world. It would be cynical, then, not to take very forceful action.

No one can ignore the extreme urgency of achieving an international post-Kyoto agreement to substantially reduce carbon dioxide emissions.

Over the last number of days, Ireland has been struck by severe flooding causing devastation for ordinary families, for small businesses and for farmers across the island. Flooding from the River Barrow, the second longest river in Ireland, has meant much of Carlow has been under water for over four days! The deluge in neighbouring Kilkenny is the worst in 60 years! While flooding has always been a fact of life in Ireland, its increasing frequency and severity is another real reminder of the effects of climate change caused by the reckless abuse of our environment. No matter what happens at the UN climate conference in less than two weeks in Copenhagen, extreme weather conditions, like the flooding in Ireland, will become more frequent. We must build up our resilience to the effects of climate change

	There is also the problem of the desertification of vast areas of the Earth. This is causing a humanitarian and economic catastrophe. The first signs of this are the unrest in Somalia and predictions of future conflicts over water. The wave of migration is growing. Global warming currently poses two major problems to humankind: on the one hand, the need to cut greenhouse gas emissions dramatically and, on the other hand, the need to adapt to the effects of climate change
European Parliament (2010a)	Mr President, there was a lot of talk about so-called climate refugees in connection with COP 15. People have always fled from natural disasters, poor harvests, drought, floods and famine. The fact is that climate change and its direct impact on people and the environment are problems that we have no choice but to deal with. In connection with COP 15, for example, there was mention of the Cook Islands – an island group in the Pacific. The problem these islands face is that they are under threat from rising water levels. A sea wall could protect the islands, and in fact, a sea wall is a perfectly manageable investment – just not for a poor island group. While we in the West discuss wind power, electric cars, solar energy, biofuels and new ways of sorting waste in the suburbs of Europe, many islands are gradually disappearing. May I remind you that it is not merely a question of restricting the repercussions of climate change. It is a much broader challenge; the challenge of changing to a new development model, a green development model which will be Europe's answer to the need to create new jobs, to support the competitiveness of the European economy and to consolidate the leading role of the European Union in the new order. In my constituency, in Noordwijk aan Zee, which lies just behind the North Sea dunes in an area that will be first in the firing line if the sea level rises, the schoolchildren were told a story entitled 'A meeting', about snowmen deliberating how to keep the warmth at bay. They talk and talk until they have all melted. To be frank, on a bad day, this debate does remind me a little of that. The context in which we will be moving in Mexico, and the context in which we have been moving, is that of a growing population, a food shortage, a need for more agriculture, and limited land and water resources; therefore, any

	decision we take on climate change must be considered within that context. Of course, we must also remember that many countries have a right to develop. However, we have a clear view on the phenomenon of global warming and the need to take action. The European Union must continue its efforts at foreign policy level, especially discussions with the United States and China. Yet this sector is one of the most fundamental elements in the fight against climate change. European agriculture is currently preparing to switch over to more sustainable production models, with more responsible water management and models that are less energy-intensive and less dependent on chemicals, because it realises that biodiversity and the preservation of ecosystems are the very keys to a reduction in environmental pollution. So, please, when are we going to acknowledge that agriculture ... To conclude, it is our duty for future generations to continue to lead by example and reach a legally binding agreement by the end of this year, ensuring a better and sustainable future for all. The problem of climate warming is one of the main issues troubling the modern world.
European Parliament (2010b)	Mr President, Commissioner, ladies and gentlemen, I could have limited my speech to simply recalling the images of this summer in Russia or southern Asia, to reminding you of the absolutely urgent need to combat climate change and, since we are talking about Europe, to move immediately, or as soon as we possibly can, to a target of 30% by 2020 for greenhouse gas emissions. In order to avoid being wholly negative, I see great promise in supporting cooperation with developing countries, and particularly in protecting drinking water, as well as in our effort to ensure access to drinking water for all citizens, particularly in developing countries. Although I have critical reservations, I do not intend to retract my signature, and I hope that the forthcoming conference will, after all, result in some further progress I am also concerned that we do indeed have an increased rate of greenhouse gas emissions in our atmosphere. Take a look at the figures produced by the World Meteorological Organisation We will only achieve one thing by doing this, and that is to shift our own labour-intensive industries out of Europe to countries with much more relaxed

legislation, lower wages and poorer working conditions. We will lose jobs, and that will harm our European economies.

The battle against climate change has two fundamental features: firstly it has to be global, involving all the major polluters, from the United States to Brazil, China and India. Secondly, it has to be a series of measures that are effective in their impact on climate change, we need to be able to measure that impact, and they must not be detrimental to economic growth.

There are and may be binding agreements, there are sectoral agreements, there is technology transfer and there is support for research. All the options need to be brought into play, along with a radical increase in energy efficiency in all sectors of the economy and of society. This is the only way that we will be able to effectively tackle the problems of climate change.

I believe that withdrawal from one of the most severe crises of our times cannot be an option. I would also like to say that we have an opportunity to put ourselves to the test in Cancún on various matters that have been mentioned here, and also to test our abilities in terms of redistribution and giving support to poorer countries and the poorest people. I believe that responding to the environmental crisis also means responding in a unified and fair way to the economic and social crisis that we are currently experiencing. Now that is being realistic.

The agreement we reached in Copenhagen has produced some significant results, one of them definitely being the decision that we must take action to limit the global increase in temperature to below 2 degrees Celsius. We must persist with this target, and now is not the right time to change it, even if that were to mean aiming for a lower target. We must remain credible. We cannot change such important decisions from one year to the next.

The main objective included in the resolution is to reach a compromise on the fight against climate change and global warming. If we want to achieve this objective, we must win the support of the largest countries and the biggest emitters

Nature, however, can take no account of every-day political necessities. It will respond to climate change, with all its associated negative consequences for people, indeed for humanity as a whole. If we do not succeed in communicating

	the urgency of this matter, and particularly the urgent need to take action, a significant proportion of our funds will have to go towards disaster aid in the not too distant future. The fight against climate change must be conducted on a global level and with everyone's involvement, but the idea that our position must depend on that of other countries is irresponsible and does not do justice to the role that the EU has set itself, namely a leading role in guiding cultural revolutions at a global level, primarily the fight against climate change. Copenhagen. It is no longer possible to deny global climate change. The planting of vineyards in mountain areas, and the cultivation of crops where they never grew before, are examples of this, as is the more frequent occurrence than before of natural disasters.
European Parliament (2011a)	The second area is, of course, the reduction of soot. We know that aerosol soot contributes to global warming and, in particular, when it forms deposits on areas of snow and ice, it causes them to melt more quickly. It is produced as a result of the incomplete combustion of fossil fuels The Commission is also fully aware of the short-term climate implications of black carbon and tropospheric ozone, particularly – as I think Mr Seeber mentioned – in the Arctic area and in the Alpine regions. Madam President, the changes in the climate which we are all experiencing have ecological and social repercussions that ultimately affect human health not only through changes to the quality and quantity of water, air and food, but also through changing weather and agricultural patterns and ecosystems. Madam President, we have a paradox nowadays between the need to control polluting emissions and the tendency to increase consumption at a time of globalisation. We are looking on helplessly at the disastrous impact of climate change, but hesitate at going ahead and adopting more concrete measures
European Parliament (2011b)	We have no time to lose. The extreme weather events in 2011 alone and the melting of the glaciers and icebergs show that climate change is well under way. This is why we need to make substantial progress at the COP 17. Mr President, the International Energy Agency just recently published a report saying that the developed countries of this world, the industrialised countries,

have about five years to change fundamentally the way they produce energy and the way they consume energy in order for us to stay below a two degree increase in temperature.

Now, if we do not stay below two degrees, we know what will happen. This is when the self-enhancing effect sets in, when it gets out of control and catastrophe happens.

The worsening of the climate situation is increasingly obvious and emissions have never been as high as last year. Cancún was a relative success but since then, nothing has happened in practical terms.

Internally, I have to say that I am a little disappointed by the lack of an ambitious approach to the problems concerning water, including too much water, too little water, floods and droughts.

Global warming is being forced ahead by population growth and demand for energy by all those extra people: 200 000 extra people on the planet every day. It is clear that the nations of the world do not care very much about the more vulnerable ones, about protecting those at most risk from climate change, or indeed about passing on the costs of dealing with climate change to future generations, but maybe self-interest will start to prevail.

We look at the predictions of the International Energy Agency, of oil prices within five years going up to USD 150 a barrel as a standard. That, I think, is double what the Commission was predicting when it carried out impact assessments for the climate change package just a few years ago. Perhaps also it will be driven by the self-interest of fear: fear of being left behind. No country is changing its energy mix faster than China; no country is trying to move away from coal, develop global warming, improve its energy efficiency, develop an emissions trading scheme more than China. There are going to be economic winners, and there are going to be economic losers on this planet. We need to make sure we are on the side of the winners.

However, the EU cannot stop global warming on its own. We will only see results if the rest of the world acts with us. We not only wish to strike a balance between the environment, security and the economy, but also hope to share responsibility between the EU and the rest of the world

Madam President, ladies and gentlemen, I find it essential for every responsible European politician to care deeply for environmental protection. I, too, care deeply for the fight against climate change, but this is a global issue, and global problems require global responses.

Madam President, global warming is one of the most serious threats at the moment. Climate change will have a considerable environmental, economic and social impact.

Dan Jørgensen referred to the World Energy Outlook and that it said that we have only five or six years left. That is, of course, why we cannot afford a conference in Durban where, when we leave for home, it seems that we got something good for the process but we did nothing that could reduce emissions. We must always bear in mind that reducing emissions is the important thing. That is why we tried to use whatever we have to give leverage to the negotiations in order to try to push others in our direction.

Broadly speaking, the situation is serious: the climate is changing, emissions are rising, Europe is experiencing a financial crisis.

There is a large amount of scientific evidence highlighting the existence of climate change and its consequences, which makes it absolutely necessary for global action to be taken to tackle this major challenge of our century and of the future.

According to the latest forecasts, if current emission levels are maintained and no suitable measures are taken, the threshold will be surpassed for limiting warming to 2 ˚C already during this decade. Is it not time for us to devise a Plan B for the EU or new methods for involving those who will accumulate carbon dioxide in the atmosphere in the coming years?

The European Union is the only international organisation which, at a time of crisis, wants to go against the grain and be a leader in the fight against climate change.