

Dynamics in Attention to Environmental Problems: Patterns in Four EU Member States

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Abstract

In this article we present an empirical analysis of the attention to environmental issues on political agendas. We analyze and show how the up and down is affected by multilevel dynamics and in competition with other policy issues. European environmental policy making is a multilevel game and thus we study and link policy agendas at the EU member state level with the European union level. The empirical analysis is based on the patterns of executive speeches of four different EU member states, and the EU council conclusions. The theoretical perspective for this analysis is given by the issue attention cycle presented originally by Downs (1972), the agenda setting theory of Kingdon (1995), and the theoretical work on agenda setting done by Baumgartner and Jones (2009; Jones & Baumgartner, 2005). We conclude that political attention for environmental policies is sensitive to cyclic attention patterns, and that attention on national political levels has been decreasing since the environment became increasingly an European issue.

Introduction

When in 2007 Al Gore toured through Europe to promote his *Inconvenient Truth*, he found an attentive public in many European countries. After years of declining attention for the environment, Gore's film on global warming created a spike of interest, both in media and politics (Breeman & Timmermans, 2008). But attention to the film's message did not persist when the economy went down. In early 2009, opinion polls showed a decline in public concern with the environment, despite an increasing urgency of the global warming problem reported by international experts such as Nicolas Stern (world bank) and national and international organizations for environmental policy advice (Scruggs & Benegal, 2012).

The environment is not unique in showing this pattern of rise and decline. Attention to other policy problems such as unemployment, crime, and social tensions over immigration also rises and spreads publicly and politically and then drops and becomes a matter of concern of much smaller communities of actors with professional stakes in the issue (Baumgartner & Jones, 2009). Indeed, rather than a unique and isolated phenomenon, the rising and declining attention to the environment itself is related to other topics that may compete for attention by policy makers (Baumgartner, 2006). Such patterns of attention become more visible in a longer time perspective. Analysis of attention to problems over at least 25 years period may reveal how different policy themes and more specific subtopics come and go together, or push each other from the agenda.

Thus, for most issues considered over longer periods of time, broad attention is an exception rather than a rule. While this idea has informed studies of agenda setting in the United States and other countries since the work of Schattschneider (1960), Bachrach and Baratz (1962), Downs (1972), Cobb and Elder (1983) and Kingdon (1995), less is known about how attention for an issue travels from one level of government to another. Such issue 'traveling' may involve prioritization at different levels of government at the same time, from local to national and further to international and supranational organizations such as the European Union, or it may be that attention shifts from one level to the other, with a multilevel substitution effect in the attention to environmental problems. In this contribution we analyze how in a multilevel setting, attention to the environment developed in the past three decades.

Our central question is: in what way does multilevel governance effect the rise and decline of attention to the environment? The empirical analysis is based on datasets of the agendas of the national executives of Denmark, the Netherlands, the United Kingdom, Spain, and the conclusions of the summits of the European heads of state in the European Council.¹ These four countries are all parliamentary democracies, but they vary in party system and types of executive. From an agenda-theoretical perspective, we analyze how interactions between the EU and member states produced ups and downs in attention to environmental problems.

¹ The Council usually meets 4 times a year, although in times of crisis the meetings are more frequent.

The next section presents a theoretical perspective for analyzing attention to environmental problems. Then we present our method of data collection for four countries in the European Union, and the following sections discuss empirical patterns within these countries as well as the way in which domestic attention and attention within the European policy arena is connected.

A Theoretical Lens on Environmental Attention

In his early and often cited theoretical model of environmental attention, Downs (1972) argued that patterns of attention are cyclical. Writing in the early 1970s, he predicted that the rising prominence of ecology in public and political debates in the United States would be temporal and be followed by a decline. In Down's issue attention cycle, a 'pre-problem stage' is followed by a phase of discovery and political actors claiming they are able to solve the problem, and then a stage of decreasing enthusiasm as problems appear to be more intractable than expected or portrayed, and a public that becomes more concerned with other problems. As Downs put it, in this 'post-problem stage', "an issue that has been replaced at the center of public concern moves into a prolonged limbo – a twilight realm of lesser attention or spasmodic recurrences of interest." While attention thus drops after a loss of public and political interest, the problem is latent until events or incidents trigger renewed attention. Attention thus often recycles over a longer period of time.

Agendas, venues, and policy images

The most ambitious and comprehensive approach to study the process and content of agenda setting following this early work is the theory of punctuated equilibrium and the extensive empirical analysis on policy agendas developed by Baumgartner and Jones (2009; Jones & Baumgartner, 2005). Typically, this work does not focus on single issues but considers the whole range of problems that governments face, and analyzes how different agendas constructed in the spheres of politics, the media and the public are related. Agendas may expand and contract over time as issues are scheduled for attention or intrude unexpectedly. While initially this approach to policy agendas was limited to the United States, an international Comparative Agendas Project was launched in order to facilitate large scale empirical analysis of politics of attention to problems over a long time period (Baumgartner, Green-Pedersen, & Jones, 2006; Brouard et al., 2009).²

Core observation in agenda setting studies is that attention to policy issues evolves irregularly. Attention levels stay stable for a period of time but are interrupted when in the constant flow of information, politicians, journalists and other actors alike see a particular problem as urgent (Baumgartner & Jones, 2009). In other words, issues tend to shift from low politics to high politics, and vice versa (Downs, 1972). If a

² See also our shared website: <http://www.comparativeagendas.net/>

policy is in a status of low politics then it tends to evolve incrementally, without much attention in the media and in political arenas, in such situations the scope of debate is limited. Policy in high politics means that attention of politicians and media is high, often involves drama and the issue may become politicized. Issues may arrive in the sphere of high politics after the discovery of a policy failure or a focusing event (Birkland, 1997). High politics is however not a necessary condition for policies to change. On the contrary, most policy changes are done in the sphere of low politics. If a policy recedes from high politics to low politics it is usually taken over by specialists who take care of the implementation, such as technical experts and lawyers. Together they form a policy monopoly or subsystem in which the chosen policy scheme is institutionalized (Baumgartner & Jones, 1991; Smith, 1990).

Within a policy monopoly there may be a specific dominant policy image (Baumgartner & Jones, 2009). Through time this image can change either incrementally within the existent policy community or as a result of a sudden focusing event in which a policy problem is dramatized. Policy monopolies do not stay immune for signals from the outside world. Focusing events may trigger attention to the policy and policy entrepreneurs could provoke a cascade of attention through which the policy will be perceived increasingly as problematic. A hype in media or politics may trigger positive feedback loops which results in a cascade of reactions (Pralle, 2003; S. B. Pralle, 2006). It may increase the criticism further resulting in a sense of urgency through which new solutions and new policy monopolies may become possible (Kingdon, 1995).

Central in the theory of the punctuated equilibrium are policy venues. These are institutional sites of agenda setting, not only formal political arenas such as legislatures and executives, but also the media, public opinion, bureaucracies, and forums for scientific expertise. Within policy venues different visions and ideas about the issue are being debated, created, and communicated. Typically, venues and policy arenas have their own rules of access and information, and in this way they may facilitate a particular emphasis on topic and tone in agenda setting. Some may facilitate the spread of a popular and dramatic image of a problem, others lead to more technical approaches to policy problems. Hence every venue as its own specific bias; Some venues may be of more help to expand a problem definition whereas others limit a problem definition. Actors use these venue characteristics for their own interests, although not everybody as equal access to the venues, which means that there are institutional limits to venue shopping (Rochefort & Cobb, 1994; Schattschneider, 1960) (Pralle, 2003).

Attention levels may depend in part on the nature of the problem but defining problems is itself a key element of agenda setting (Rochefort & Cobb, 1994). As Baumgartner and Jones (2009) say, accounting for attention patterns requires the theoretical and empirical inclusion of different venues. Strategies of agenda access or denial are employed for problem definition. The added theoretical value of Baumgartner and Jones' work is that it links two key elements of attention cycles: the venues of agenda setting, and the constructions of topic and tone made within these venues (Baumgartner & Jones, 2009).

Agenda-setting on environmental issues

Not all problems are equally sensitive to ups and downs in attention, though. Problems may not be directly visible, effects may 'creep' rather than 'crash' onto the agenda (Princen & Rhinard, 2006), and some issues represent deeper social cleavages and are easier to dramatize and keep the public interested than others. Moreover, some problems are external effects of social or economic activities that most people would not readily sacrifice, and politicians thus are careful in asking such sacrifice for problem resolution. According to Downs, environmental problems have characteristics of issues for which attention is cyclic. In later work mapping environmental attention in the United States until recent times, the prediction of Downs appeared only partly true: public interest has shown clear peaks and declines (Guber, 2001), but political attention did not disappear and some stability in environmental policy production occurred after the initial buildup of institutions endowed with this task (Baumgartner, Green-Pedersen, & Jones, 2006; Baumgartner & Jones, 2009). Downs may have overstated the effects of opportunistic behavior of politicians in response to the public mood, and understated the significance of institutionalization.

The idea that different venues of agenda setting facilitate or promote a particular conception of a policy problem is crucial to the evolution of environmental attention and the cyclical pattern that may (or may not) become visible over time. As Baumgartner and Jones (2009) argue in their theory of punctuated equilibrium, the stabilization and destabilization of 'policy monopolies' happens within and between venues. If we say that venues facilitate a particular type of policy conception, this means that these venues have institutional properties conducive to the replication and aggregation of particular problem frames. These frames and corresponding problem definitions may be technical or more dramatic. Technical frames stress rational and expert-oriented approaches to problems, and facilitate their decomposition for resolution. Dramatic frames play on collective emotion and expanded public and political debate, they link rather than disconnect sensitive issues. Typically, dramatic frames go with rising attention to problems, technical frames with lower levels of attention. The agenda space however is far too limited for many problems to obtain drama and priority status. The political agenda involves competition among topics to be addressed.

In this contribution we limit our analysis to one particular venue, the executive agenda of the European Union and four of its member states. Novel to the agenda setting literature is that we analyze the multi-level dynamics of political attention to the environment. This is especially important for environmental policies in Europe because it is a shared competence of the EU and its member states. Environmental problems are seen as matters addressed in a multi-level governance system (Pollack, 2000; Hooghe & Marks, 2001; Marks, Hooghe, & Blank, 1996). Recent work on environmental policy also argues that the EU has become a global leader in setting the environmental policy agenda (Keleman & Vogel 2009).

Multi-level governance is described as “a system of continuous negotiation among nested governments at several territorial tiers – supranational, national, region and local” (Hooghe & Marks, 2003, p. 234). This means that the boundaries between different levels of policy making are blurred and different patterns of interaction and power games are being played. It also means that member states lose part of their sovereignty and they may lose some of their policy agenda setting capacities; they are no longer able to monopolize the agenda (Braun & Santarius, 2008) (Marks, et al., 1996). Hence, multi-level governance affects the way politicians and interest groups try to influence and set the policy agenda (Princen, 2009);(Beyers & Kerremans, 2012).

Agenda setting over longer time periods has been studied at the country level and recently at the EU level (Alexandrova, Carammia, & Timmermans, 2012; Princen, 2009). Less is known however about the dynamic of attention between different levels in multi-level agenda setting. While in theory, multi-level governance is seen to influence agenda setting dynamics at both the national and the EU level (Braun & Santarius, 2008) (Marks, et al., 1996), empirical analysis of the interplay between levels of governance in the EU is still scarce. Does the expansion of environmental jurisdiction at the EU level involve similar rises in attention at the national level? (Princen 2009)? Or is there evidence that, as Rhodes (1994) states, multi-level and vertical governance hollows out the national state, and domestic actors with stakes in a topic move their venue shopping at the higher level, to the institutions of the EU? If this shift occurs, it may imply a decline in attention at national level institutions.

Based on these different possibilities, two opposite hypotheses may be formulated. The first hypothesis follows the argument in the agenda-setting literature that attention in one venue triggers and increases attention in another venue. This cascading effect has been found for media and political venues (S. Pralle, 2006; S. B. Pralle, 2006; Walgrave & Vliegthart, 2010). Also from a multi-level perspective, attention at one level of governance may spark attention at the other level (Collinson, 1999). In studying environmental policy, Princen (2009) observes a parallel development in attention within EU institutions and member states. Thus our first hypothesis is:

Hypothesis 1:

If attention to the environment rises on the EU agenda, then attention in member states also rises.

However, in the alternative view, decisions made increasingly at the EU level lead stakeholders to shift their activities from national to EU level, and national policy making institutions may turn to other problems. The activities in the national venues of agenda setting may be depleted in favor of the EU venues (Rhodes, 1994) (Braun & Santarius, 2008; Marks, et al., 1996). Attention at difference levels of governance may develop in opposite directions, show an institutional substitution effect. The rival hypothesis thus is:

Hypothesis 2:

If attention to the environment rises on the EU agenda, then it declines on the national agenda of member states.

Research Approach

A key feature of the agenda research is the use of a similar codebook containing nineteen main topic categories such as macro-economy, international affairs, and health, and nearly 250 subtopic categories for more specific subjects such as income tax, international human rights, and the regulation of medicine. The list of main topic categories is given in appendix A (Baumgartner & Jones, 2009, 2002; John & Margetts, 2003; Jones & Baumgartner, 2005). In this paper we focus on the political attention to environmental issues. This includes topics as different as solid waste recycling to climate change, to water pollution and asbestos problems. Appendix B gives a detailed list of the topics included in this research.

The data collected for this analysis is done by different national policy agendas projects, mapping attention to problems across all policy fields in different venues over varying periods (John & Jennings, 2012) . All national codebooks are slightly adjusted to the national situations. The coding protocol has been comparable in all countries. All entries are double coded until an inter-coding reliability was reached of 85% on the main topics and 80% on the subtopics. We included, Denmark, the Netherlands, the United Kingdom, and Spain in our analysis. Besides of having data available on these countries, they also represent the entire spectrum of forerunners in environmental policy making, Denmark and the Netherlands, a middle of the road country, the UK, and Spain as a country that lags more behind in this area (Liefferink & Andersen, 1998).³

The goal of this paper is to measure the attention government is paying to environmental issues, and to analyze shifts in attention to the environment on national and Union level. We used executive speeches as an indicator of government attention on the national level and the European Council conclusions as an indicator of attention to problems at the Union level. The executive speeches are given at the opening of the parliamentary year. In these speeches, governments communicate their plans for the coming year. In previous work we found that speeches are a reliable indicator of executive attention (Breeman et al., 2009; Jennings, Bevan, & John, 2011) (Mortensen et al., 2011). The European Council conclusions contain the main statements produced in European summits, which are organized four to six times per year. All heads of state or government of the EU take part in these summits and they discuss general policy concerns, intentions, and outlooks on future topics of interest to the EU (Alexandrova, et al., 2012). Council conclusion are just as executive speeches a formal agenda on a high political level, displaying the most

³ The Member States that joined the EU in 2004 could have served as a laggards but their EU membership has been too short to conduct a long trend agenda setting analysis. Greece would have been a nice addition, but data was lacking; besides, it only joined the EU five years earlier than Spain.

important policy plans for the upcoming period. We accumulated the contents of the Council conclusion per year. Table 1 summarizes the data used.

Table 1 here.

The annual executive speeches are coded per sentence or quasi-sentence.⁴ Dutch Queen's speeches are read by the Queen at the 3rd Tuesday in September when the annual budget is presented, but they are written by the government (Breeman, et al., 2009). The British Queen reads the speech in October or November at the opening of the parliamentary year, except after an election (Jennings, et al., 2011). This speech is also written by the government. The Danish executive speech is read by the prime minister on the first Tuesday in October during the opening ceremony of the parliament (Mortensen, et al., 2011). Finally, the Spanish speech is presented by the prime minister who has more discretion in setting the moment compared to the other countries (ibid).

In the following paragraphs we first provide an overview of the up and down of the attention to the environment per country. Then we present an overview of the historic developments at the EU level.

Patterns of Attention in Member States and the EU

Denmark

In Denmark, governmental attention to the environment took a start in the 1960s (see figure 1a). However, most of the environmental issues discussed in those early years were linked to spatial planning, such as re-allotment. Attention to the environment as a separate topic increased during the early 1970s, reaching its first peak in 1981. In that year the government announced for instance waste recycling programs. Attention in government speeches was at lower tide in the 1980s, with a focus on water quality issues. In these years opposition parties however called more attention to the environment (Green-Pedersen and Wolfe 2009: 635). Rising concerns about the environmental consequences of framing produced a second major spike of attention in 1988. The Danish government made efforts to solve the increasing polarization between interests of farms and commercial enterprises and environmental actors. It states that: "For many years we have talked about the conflict between the business - and environment interests". Instead, the government promoted a win-win situation, in which new jobs could be created in the environmental domains.

Figure 1a here

From 1990 onwards the issue of CO₂ emissions and the greenhouse gasses as well as air quality in general was high on the policy agenda. In 1994 and 1995, when the

⁴ A quasi sentence is identified when two full sentences are linked together with for instance the word 'and' or with a semi column and different topics are addressed in these separate quasi sentences. Enumerations in a sentence that show equal stress on each topic also are split up in separate entries and coded as such.

attention reached a spike again it was scattered around various topics. Characteristically however the government linked the improvement of the environment again to the creation of jobs and the improvement of social welfare. "The nature of the environment is the basis for our welfare." The government urged that "on the whole the target to environmental concerns should be incorporated in all important decisions and initiatives - both in society at large and in decision of the individual companies and citizens. We need more research and education that will create new business and employment opportunities". After 1997 the attention to water streams and river water quality was regularly on the agenda as well as continuous attention to CO2 issues. Both issues were being discussed in connection to the EU had to play in this, as well as to international treaties and climate conferences.

Summarizing, the pattern of attention in Denmark to the environment started with mostly national issues, such as spatial planning and water quality. From 1990 onwards problems were defined more broadly as EU or global problems, such as CO2 reduction and climate change. The attention to domestic water and, to a lesser extent, soil problems also remained on the agenda. Typically, Danish governments linked and integrated environmental policies with employment and social welfare.

The Netherlands

In an earlier analysis we found that until the mid-1970s, the environmental statements of the Queen concerning the environment were mainly about air and water quality (Breeman & Timmermans, 2008). Specific attention was given to the Waddensea area, which now is a UN protected area. From the early seventies onwards also the protection of the soil got attention, but this really reached a high level of attention in the 1980s when huge areas in the Netherlands turned out to be polluted and when in 1984 the manure surplus produced by the intensive farming was pinpointed as a big polluter.

Figure 1b here

In our research period, however, the first and biggest spike of attention to the environment occurred in 1989 (figure 1b). In that year the government announced its first National Environmental Policy Plan, which has been published every four years until 2001. The 1989 Queen speech also mentioned the organisation of one of the first United Nations' world climate conference in the Dutch town of Noordwijk. The queen was stating that 'the UN conference of this year, which was dedicated to the pollution of the atmosphere and climate change has given us a long term perspective to develop environmental policies.' In the following years the government was implementing the national environment plan, focussing on water and soil quality but also on pollution caused by cars and traffic as well as the reduction of waste. The importance of the EU to tackle these problems was explicitly mentioned.

The attention to the environment declined during the economic lesser years of 1992-1994 and came back on the agenda in 1995, announcing the first Environmental Balance report. The dominant topics were the CO2 emissions, sustainability of

production, and air quality. After 1997 the notion of CO2 disappeared and the more broader term of climate change appeared in the Queen speech; although first mentioned in 1989, climate change was put on the agenda from 1997 onwards (1997, 2000, 2001, 2005, and 2007). General attention to the environment declined after 2001, remaining on a relatively low level of attention. The topics that were mentioned in 2000-2002 concerned the penalties and monitoring of the environmental regulations. And after 2002 the stimulation of sustainable energy, reduction of the pollution by cars and the international conferences on climate change were occasionally mentioned.

In general terms, the focus of attention in the Dutch Queen speech changed from national to more global problems. Until 1990 the national problems with water, soil, and air were on the top of the agenda. Sometimes triggered by national events, such as the massive soil pollution in 1980 (Lekkerkerk) and manure problems in 1984. Then from 1990 onwards, attention shifted to CO2 reduction, sustainability, reduction of traffic pollution, and waste reduction, and for all these issues the importance of European cooperation was mentioned explicitly. After 2005 the global problems of climate change, sustainable energy and the link between poverty and climate change became more prominent.

United Kingdom

Based on our analysis of speeches from the Throne, until 1989 environmental policies in the UK show a consistent pattern of recurring attention to issues of water quality (figure 1c). This was about the foundation of river boards (1950), the protection of the coast line (1970), reduction of oil spilling due to off shore drilling (1978), or the foundation of a national rivers authority (1988). To a lesser extent the British government has paid attention to the protection of the wild life and the country side. The pattern of attention for the environment for the 40 years following the Second World War is nicely summarized by a statement of the Queen in 1970, saying that "My Ministers will intensify the drive to remedy past damage to the environment and will seek to safeguard the beauty of the British countryside and seashore for the future".

Figure 1 c here

After 1989, landscape and water were on the agenda, but we also see a broadening focus on issues of pollution and waste policies. These issues caused the high spike of attention in that year. The broadening of attention continued, and in 1993 the government announces an environment planning agency and in 1994 the establishment of environment agencies for England and Wales, and for Scotland to 'strengthen the delivery of environment policies'. Typically, in the period 2000-2002, the issue of hunting with dogs becomes a prominent issue on the political agenda. At the same time the focus of the United Kingdom broadens further referring after 2001 many times to international environmental events. Explicit references to domestic environmental issues seem to be pushed to the background, or understood as part of global challenges. In 2001 the Queen refers to the 'United Kingdom's international obligations arising from the Kyoto Protocol'. In 2002 she mentioned

'World Summit for Sustainable Development in Johannesburg and focusing on tackling climate change and finding new ways to meet our energy needs'. In 2005 the government announces that it 'will use its Presidency of the G8 to secure progress in tackling poverty in Africa and climate change.' Then after 2006 the government announces the establishment of long term perspectives on energy supply (2006), reduction of dioxide emissions (2007) and on climate change in general, 'to protect the environment for future generations' (2008).

In general terms the United Kingdom shows a trend from domestic environmental issues about water and landscape towards global environmental issues of climate change and sustainable development, referring to international venues, such as UN climate conferences and the G8. Around 1989 the scope of issues that came on top of the agenda has been broadened towards waste and pollution and in the period between 2000-2002 the government paid particularly attention to the issue of hunting with dogs.

Spain⁵

Before 1995 the Spanish government remained rather silent about environmental issues (figure 1d). There are some small remarks in general terms, such as in 1990 when the increasing consumption was seen as a threat to the environment. But then in the period of 1995-1998 the government started building an institutional structure, stating in 1996 that "it is time to create a Ministry of the Environment". In that year it also pays attention to a new zoning policy and urges regions and the administration in general to take an effort in protecting the environment, saying that "It is a fact of great importance, not only for everyday life, but to our rightful inheritance transmitted to future generations". It also starts formulating laws that deal with the environment; in 1998 the government explicitly announces the environmental liability act.

Figure 1d here

Then, from 2000 onwards different specific environmental related issue are being mentioned in the speeches. In 2001 the government announces special programs for the forests and the mountains; in 2003 the protection of water as well as marine issues were put on the agenda and in 2005 the speeches mentioned greenhouse gas reduction and irrigation. The 2003 speech was particularly focussing on marine issues, because in that year an oil tanker, the Prestige, caused an environmental disaster spilling oil on the Galician coast. This was the reason for the Spanish government to raise maritime safety standards. From 2005 onwards the implementation of the Kyoto protocol that went into force in that year, was high on the agenda, highlighting renewable energy and CO2 reduction programs. Finally in 2007 the word climate change was put on the agenda, which has been returning every year since then. The Spanish government developed sustainable rural development programs in 2007 mentioned landscape policies in 2008, recycle

⁵ Thanks to Leticia Elias who checked our Spanish translation.

programs and regulations against polluting industries in 2009 and sustainable transport policies in 2010.

Based on the speeches and compared to the other countries in this analysis, Spain started rather late with environmental policies. From 1995 onwards, it build an institutional structure, soon to be develop into specific topics, such as forests, mountains, water, and CO2 reduction. Then Spain clearly became involved in the global environmental issues such as the Kyoto protocol and climate change, resulting in long term perspectives on sustainable development and the protection of the environment. An important focusing event in Spain that increased the awareness of at least marine policies, was the disaster with the Oil tanker Prestige in 2003.

The European Council agenda

Before 1990, European Council conclusions paid attention to many different environmental issues, showing a broad and expanding concern to this theme (Knill & Lieferink, 2007). The focus was mainly directed to topics and policies from within the European community. In the early 1980s, marine issues and water quality emerged, and in 1983 acid rain and its damaging effects of forests became a topic of concern, followed by the reduction of lead in petrol in 1984. In 1985 the principle of the 'polluter pays' was formally discussed at an EU summit. In 1988 the Council mentioned in a "declaration on the environment" for the first time the rising temperature of the earth saying that it is 'in the interests of sustained growth and a better quality of life, ... to find solutions to such global issues as the depletion of the ozone layer, the rise in the temperature of the earth's atmosphere ("the greenhouse" effect).....' In 1989 it announced a world convention on climate issues.

Figure 2 here

The spike of attention to the environment in 1990 (see figure 2) does not have a specific single cause. As Keleman & Vogel (2009) argue, environmental regulation became important for the EU as a matter of harmonizing policy regimes within member states that otherwise would threaten the single market created in the mid 1980s. In 1990 the European Council in that year published 'The environmental imperative declaration'. This declaration created a sense of urgency starting with the words: "The natural environment which forms the life support system of our planet is gravely at risk. The earth's atmosphere is seriously threatened. The condition of water resources, including the seas and oceans, is causing concern, natural resources are being depleted and there is growing loss of genetic diversity." The rest of this declaration covered all of these topics – earth's atmosphere, water, seas, and genetic diversity in more detail. The European Council came back to these issues in the years following this declaration. However, while discussing these topics every year in European Council summits, the topics become increasingly more clustered around the broader categories of climate change and sustainable development. Some of the subheadings of the European Council conclusions start carrying the words climate change and sustainability. The conclusions also began to mention international conventions and the necessity of a global approach.

In 2002, the next spike of attention consolidates the orientation of the European Council on international conventions and collaboration. The difficult ratification process of the Kyoto protocol is once again on the agenda as well as the summit on sustainable development in Johannesburg. Furthermore, the conclusions give intentions to look for 'global partnerships for sustainable development' and announce different environment related programs and strategies, such as the biodiversity strategy and one on waste recycling.

Whereas in 2002 the statements about the conventions are general, in 2007, the next peak of attention, specific goals are given, such as the further reduction of CO₂ emissions to 80% in 2050 and the limit to global warming to under 2°C increase. In 2007 the European Council also discussed the period after 2012 and the emissions' trading system. Finally in 2009 the Copenhagen summit is on the agenda, as well as the international geo-political attention to the environment on the G8 and G20 summits. The topics are about 'global climate mitigation' and adaptation and the new goals of CO₂ reduction.

Overall, the focus of attention to the environment at the EU level has shifted from themes within the EU towards a focus where the EU seeks to fit policies into a global scheme, resulting in a situation where environmental policies are part of high level international geopolitics. The topics remain specific per domain, water, soil, air, biodiversity, waste, CO₂, but from 2000 onwards these issues are clustered around the themes of climate change and sustainability.

Multilevel Dynamics of Environmental Attention

Typical of the punctuated equilibrium pattern in political attention and policy changes is the alternation between periods of stability interrupted by more drastic shifts. Figures 1a-d show the development in attention to environmental problems over time in the different executive speeches. A look at these four patterns shows the variety in attention distribution over time. Denmark shows three spikes of attention, in 1981, 1988 and 1995, and lowering tide of environmental attention since then.⁶ The Netherlands displays two waves of attention, 1987-1992 and 1995-1999, and some rise also in 2009-2010. The level of attention however, has been decreasing with every new period – the topic seems sensitive to being crowded out from the executive agenda. The United Kingdom has a clear spike of attention in 1989 and it shows after 1996 a slight upward trend. Spain shows, as expected, a late start of attention to the environment but with several clear upward spikes in 1990, 1996, 2001, 2003, and 2008. The European Council Conclusions in figure 2 show spikes around 1990 and 2002, and the following years it shows an average level of

⁶ In this paper we limited our research period between 1980 and 2010, because of the available data on Spain. Executive speeches data on Denmark are available only until 2006. Appendix C shows all available data, indicating that in Denmark and Netherlands the environment was a significant topic on the agenda already well before 1980. In the UK it also reached the agenda in early years, but with much lower prominence.

attention to the environment that was higher than in the four member states. This shows institutionalization at the EU level.

The country cases presented above however also show considerable variation, both in the pattern of attention and in the way diverse types of environmental problems were prioritized and connected to each other or to other policy topics. The European Council agenda as a venue of high politics both followed national attention patterns and also has been leading in addressing environmental problems.

To understand the relationship between attention to the environment at EU level and that at member state level we correlate the trends in attention and also analyze the specific contents of these trends. When comparing figures 1b and 1d and figure 2 we see that the speeches of the UK and to some extent also in Spain follow the pattern of attention in the European Council conclusions. Figures 1a and 1c for Denmark and the Netherlands rather suggest that national attention to environmental matters was leading the trend of attention in the European Council, but the agendas in these two countries also show a decline in executive attention compared to the European Council in the last fifteen years. The correlations presented in table 4 support these observations.

Thus, for the United Kingdom and Spain we find evidence for hypothesis 1: the rise in attention at the EU level runs parallel to the increasing concerns for this topic within the national executive. In contrast, Denmark and the Netherlands were early agenda setters on environmental matters, followed by the European Council, but once the EU caught up in addressing this theme, attention within Danish and Dutch national executives started to decline. This is more in line with hypothesis 2. We note that in the case of the Netherlands the results are significant only for the period after 1991.

Attention to the theme at large thus shows differences between four member states of the EU. Table 2 summarizes our findings for the episodes in environmental agenda setting between the initial rise of the theme to recent years. It indicates whether the emphasis on attention was on the national or the European level, or, as in the most recent years, on the global level.

Table 2 here

From this we learn that in dealing with environmental issues, Denmark and the Netherlands were referring to the EU earlier than governments in the UK and Spain. During the first peak of attention both Denmark and the Netherlands emphasized the importance of the role of the EU in environmental policies. This speaks to the analysis of EU environmental policy development by Keleman & Vogel (2009), who argue that EU institutions provided crucial venues of support and institutionalization for those member states where domestic environmental standards already were quite strict – and who thus would benefit from environmental policy diffusion by the EU ‘down’ to the other member states. At the same time, both countries were building institutions to deal with environmental issues. In Denmark, the environment

was linked to socio-economic welfare policies, while in the Netherlands monitoring systems for specific environmental policies were developed.⁷

Compared to Denmark and Netherlands, governments in the UK and Spain referred much less to the EU level. The UK also was building its national institutions, but it engaged in these activities without much reference to the EU level. The focus in this country was on setting up river boards and environmental agencies for England, Wales, and Scotland. Spain had a different starting position compared to the other countries as it became a member state in 1986. This country started to build up national environmental institutions in the 1990s, and made increasing reference to the EU towards the turn of the century and after it.

After the year 2000, the global dimension became more prominent in attention to the environment on the policy agendas in all four countries. Climate change and sustainability were referred to frequently in the speeches. Thus while in more recent years the direction of attention to the environment converged towards a global scale problem, the trajectories of attention and emphasis were different in the earlier decades.

These findings inform us about different ways in which multilevel agenda setting may happen for one and the same policy theme, and within countries that are all a member of the EU. While attention to the environment exists in the EU and member states at the same time, the trends are not always parallel. This means that existing conclusions about agenda setting on environmental issues in European countries need a qualifier. In looking at different types of policy agendas, Princen (2009) and Green-Pedersen & Wolfe (2009) find evidence for parallel development, for example in the case of Denmark. They find that in Denmark, the institutionalization of environmental attention came despite the transfer of important decision-making authority in this domain to the EU. A reason for this remaining visibility on the parliamentary agenda is the existence of minority governments and the need for consensus building in parliament on environmental issues. Our analysis however shows the contrary trend. Why is this?

Why seem the executive agendas in Denmark and Netherlands to show less attention to environment? In the Netherlands this may be precisely because the ever closer regulatory regimes set at the EU level – which is not a development much addressed by the government and in the past decade even has become a political risk (the Trojan horse, argument). The increasing executive attention in the UK and Spain following the rise of the EU environmental policy agenda remained at a lower level compared to the early attention spikes in Denmark and the Netherlands. This may signify that executive attention in the UK and Spain increased to a level just sufficient for the EU-mandated domestic policy development. Another driving condition for this rising attention in the late coming countries UK and Spain is that, when their national executives were catching up with EU policy initiatives the environment was expanding into a broader global theme – more pressing on the

⁷ The observations are only based on the executive speeches.

domestic executive agenda as other international and global themes also have such an effect of agenda intrusion.

Conclusions

The central puzzle in this paper has been the multilevel effect on the rise and decline in attention to the environment. Two opposing hypotheses were formulated in which the first said that the attention at member state level to environmental issues would go up if the attention at EU level would go up, as if it were two equal parallel processes {Princen, 2009 #1}{Pralle, 2006 #154}. The second hypothesis said that the attention at member state level would go down, if the attention was taken over by the EU level – a substitution effect {Rhodes, 1994 #157} {Braun, 2008 #149}.

Based on our quantitative analysis of the executive speeches we observed that in the cases of Spain and England the attention to environmental issues in annual executive speeches went up when the attention at the EU level was also going up (support for hypothesis 1), whereas in Denmark and the Netherlands we found a downward domestic trend at times when attention at the EU level was rising (support for hypothesis 2).

The latter findings contrast with the findings of Green-Pedersen and Wolfe (2009) and Princen (2006) who found that there is no substitution effect at least in the Danish cases - the attention to the environment increases on both the EU and national level. Green-Pedersen and Wolfe however analyzed the attention to the environment in parliamentary activities, not the executive agenda. This indicates that in multi-level dynamics, different venues play different roles. There can be increasing levels of attention in parliament for political reasons. The opposition may find it for instance important to discuss environmental issues in parliamentary committees whereas the executive may find it not important to talk about in the speeches; she may want to downplay the issue for political reasons.

In a previous research we also found the opposite trend for the Netherlands {Breeman, 2008 #50}. The amount of attention to the environment kept the same trend with the increasing attention at the EU level. The explanation here is that the amount of environmental legislation coming from the EU is transposed into national legislation without much attention both, because the executive is obliged to transpose EU regulation into national laws and because the executive found it politically not opportune to pay much attention to EU policies because the EU was not a popular issue to talk much about (*idem*). Hence here too we observe in the multi-level dynamic different patterns of attention for different venues; either for institutional or political reasons.

Additionally, both Denmark and the Netherlands are considered as forerunners when dealing with the environment {Lieverink, 1998 #159} , at least in the previous millennium, which means that they had already institutions in place and some of the policies implemented, which were only being developed later by the EU. This again

indicates an institutional reason that there has been attention to the environment at lower national political or executive levels but not on the highest levels, such as the speeches. This in contrast to Spain which had an entirely different starting position. Spain was building up its own institutional capacity on the environment and was catching up when the attention at EU level started to rise. Hence when the attention to the environment started to rise, it also did on the national Spanish level.

Finally, in the case of the UK the multi level dynamic can also only be understood if political background is taken into consideration. There is not so much a parallel process of raising attention to the environment when the EU was increasing its attention to the environment. Based on the issues that were highlighted in the speeches we observed that the UK was only raising its attention to the environment when environmental issues began to shift into global issues. The UK was dealing with the environment on a low political level and it only started to line up with the EU, when the global level was coming at stage. Hence, there was a parallel effect but, it was a result of both the EU and UK responding to the global level not because of the interaction between them.

Thus, multilevel agenda setting on environmental problems has a different meaning in countries depending on the institutional and political relationships of these countries with the level above. To fully understand multi-level governance there must also be a comparative multi venue analysis be involved.

Acknowledgments

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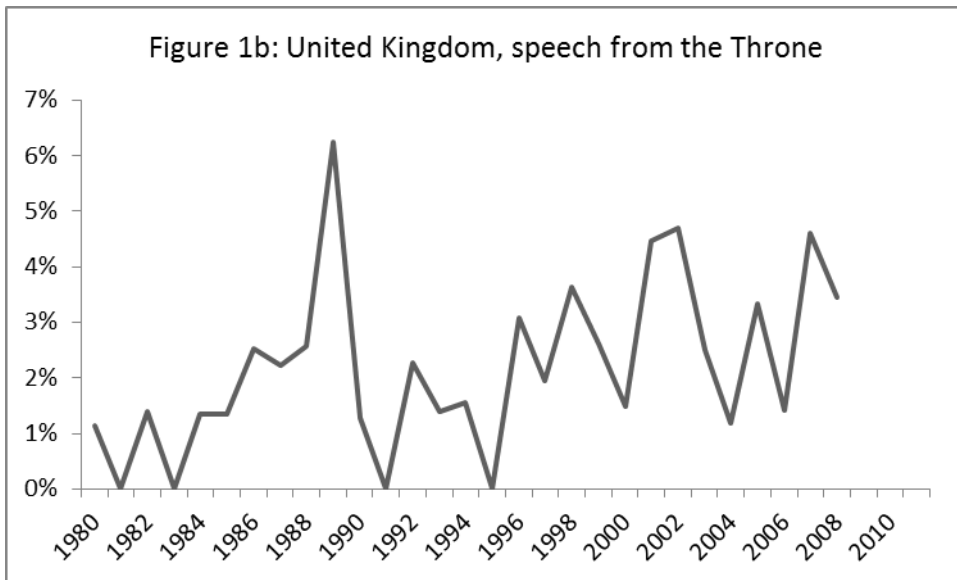
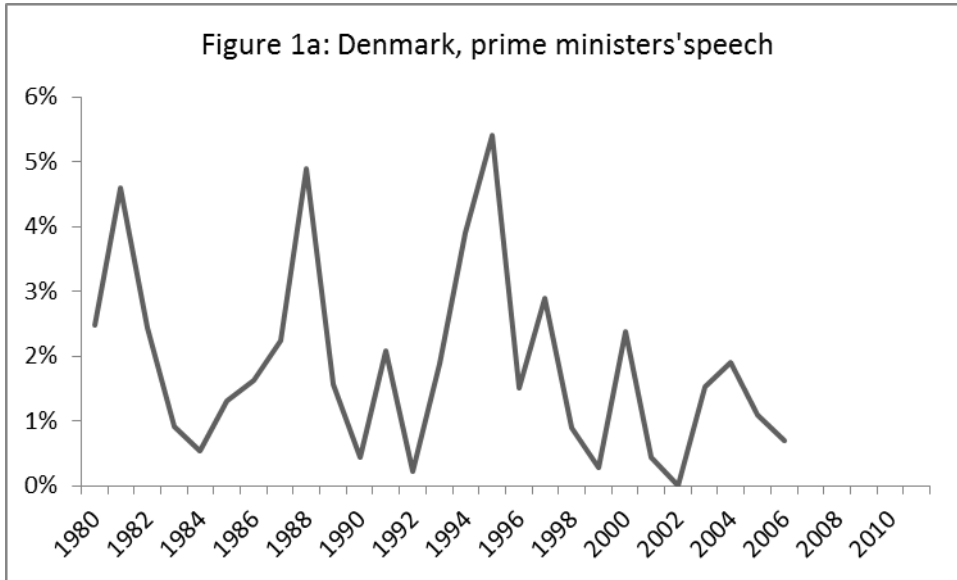
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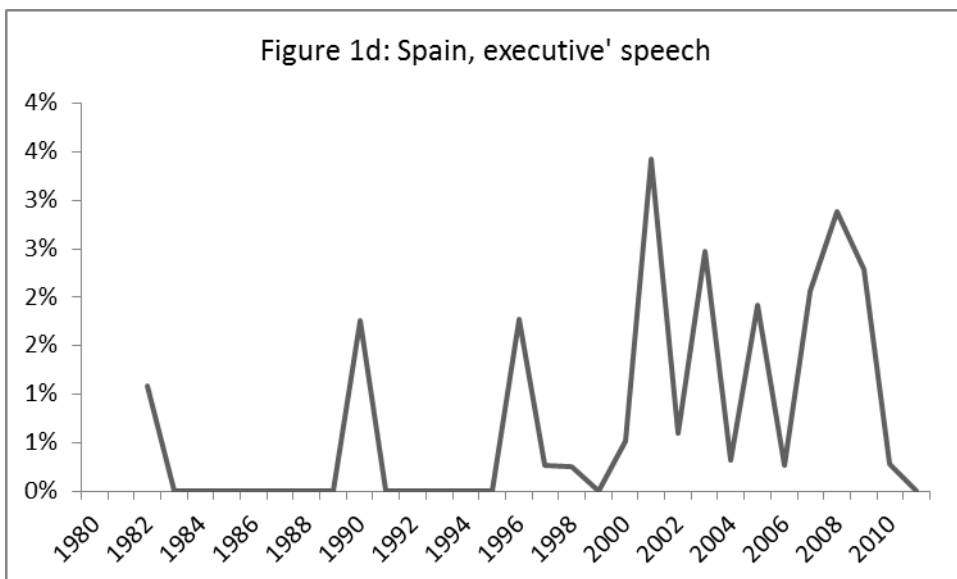
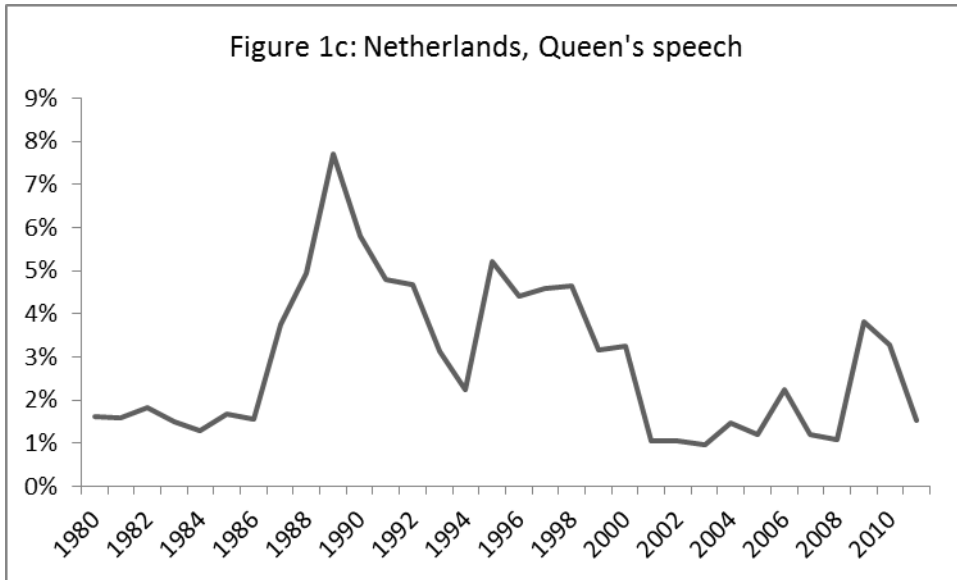
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Table 1: Data sources

	Executive speeches	
United Kingdom	1980-2008	<i>Period</i>
	2284	<i>Total amount statements/bills</i>
	51	<i>Attention to environment</i>
	2.2%	<i>Percentage</i>
Denmark	1980-2006	
	12858	
	226	
	1.8%	
The Netherlands	1980-2010	
	5424	
	165	
	3.0%	
Spain	1982-2010	
	9710	
	78	
	0.8%	
European Council conclusions	1980-2010	
	39754	
	1013	
	2.5%	





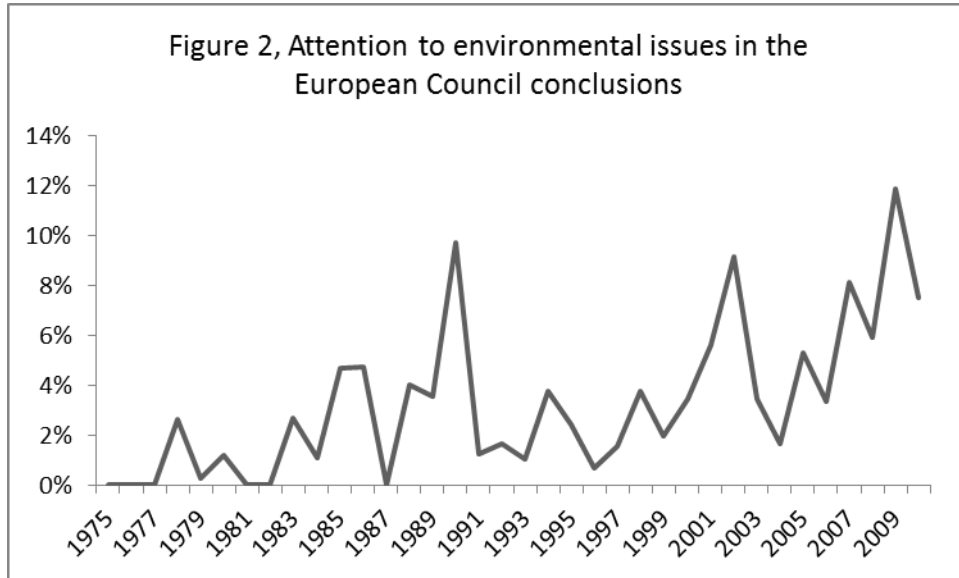


Table 4: Correlations between attention to the environment in Executive speeches and European council conclusions

	DK 1980 - 2006	UK 1980 - 2008	NL 1980 - 2010	SP 1982- 2010	NL 1991- 2010
Pearson Correlation	-0.358#	.490**	-.040	.479**	-0.401#
Sig. (2-tailed)	.066	.007	.830	.009	.079
N	27	29	31	29	20

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

#. Correlation is significant at the 0.1 level (2-tailed).

Appendix A: Main coding topics

1. Macro economy
2. Rights, Immigration, Integration
3. Health
4. Agriculture & Fisheries
5. Labor
6. Education & Culture
7. Environment
8. Energy
10. Transport
12. Justice & Crime
13. Social Security
14. Housing
15. Commerce
16. Defense
17. Science & Technology
18. Foreign Trade
19. Foreign Policy
20. Public Administration
21. Spatial Planning

Appendix B: Subtopics of the main topic environment

700: General (includes combinations of multiple subtopics)
701: Drinking Water Safety
703: Waste Disposal
704: Hazardous Waste and Toxic Chemical Regulation, Treatment, and Disposal
705: Air pollution, Global Warming, Climate change, and Noise Pollution
707: Recycling
708: Indoor Environmental Hazards
709: Species and Forest Protection
710: Pollution and Conservation in Coastal & Other Navigable Waterways
711: Land and Water Conservation
798: Research and Development
799: Other

Appendix C: overview of attention to the environment in 4 countries

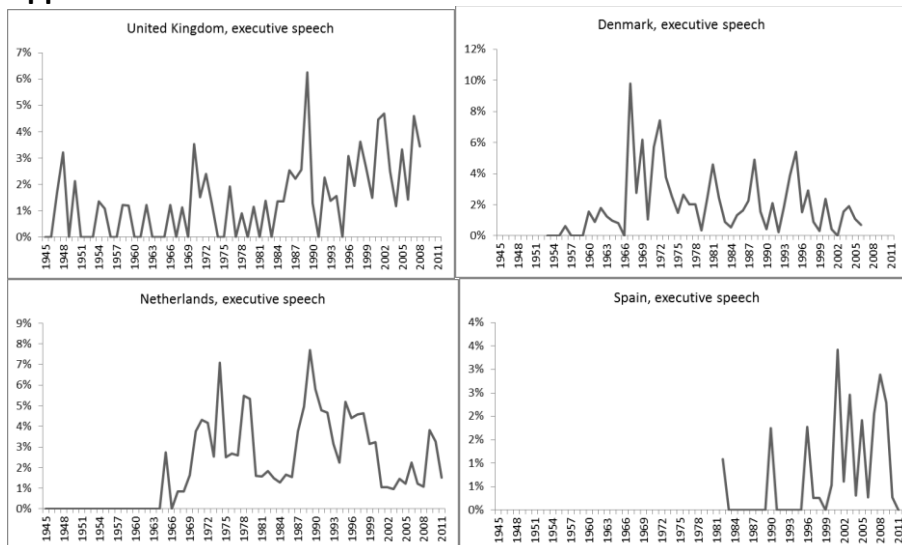


Table 2. Summary of the findings

	1970-----1988	Peak attention 1988/1989	1990-----1994	Peak attention 1994/1995	1995-----2010⁸
Denmark	National focus on specific issues: -Spatial planning -Water issues -Recycling	National focus but related to other policy domains: -Environment defined as welfare problem -Jobs creation through environmental policies -Win-win situation businesses and environment	Focus on (with EU references): -CO2 emissions -Greenhouse gasses -Air quality in general	Integrated policy focus (EU and national): -Using environment to create new jobs -Integrate environment in other policy domains	National and EU/international focus on : -water quality in rivers and streams (national) -CO2 and climate change (international)
The Netherlands	National focus on specific issues: -Water quality (due to manure surpluses) -Soil quality -Air quality -Waddensea	International focus: -UN climate change conference National focus : -New environmental monitor tool : national environmental policy plan -broad environmental programs	Focus on (with EU reference): -Water- and soil quality -CO2 emissions -Traffic and car emissions -Waste reduction	National and EU focus -Environmental balance sheet -CO2 emissions -Sustainable production -Air quality	National and EU/international focus on: -Climate change conferences (international) Monitoring environmental regulations (national) -Sustainable energy -Pollution by cars/traffic
United Kingdom	National focus on specific issues: -(Sea) water quality -Oil drillings -Country and wild life policies	National focus: -Establishing National rivers authority -Wildlife -Countryside	National focus on: -Landscape policies -Pollution and waste policies -Building national institutional capacity: -Environment planning agency	No peak attention, national focus on -continue of same topics of previous period	National and International focus: -Dog hunting(national) -Kyoto protocol -Climate change / CO2 -Long term energy supply

⁸ UK until 2008, Denmark until 2006

	-Coastline		-Environmental agencies in England, Wales and Scotland		-Linking environment to poverty -cooperating G8/G20
Spain	---	National focus: -Relation consumers vs. environment	---	National focus: Building institutional capacity: -Ministry of the Environment -Zoning policy	National and EU/International focus on: -Environmental liability act (national). -forest and mountain policy -Oil tanker disaster Prestige -Kyoto -CO2 -Climate change -Marine policy (national) -Rural development -Pollution by industries and transport