The influence of experts on the policy-formulation of the EU’s emissions trading scheme directive within the European Commission

The paper argues that the Commission’s utilization of expertise depends on its institutional needs. We have identified broadly three different functions which the Commission fulfils during its policy-formulation process: problem interpretation, policy-design and decision-taking. These three functions assume dominance at different stages in the policy-formulation process. Each of these functions requires a different utilization of expert knowledge in order to be successfully fulfilled. The problem interpretation function requires a cognitive utilization of expertise; the policy design function requires a strategic utilization of expertise and the decision-taking function requires an argumentative utilization of expertise. This framework is tested on a case study on the Commission’s formulation of the emissions trading scheme directive.

Key words: expertise, knowledge utilization, European Commission, climate change policy

The European Commission deserves special attention because of five aspects of its unique role in the EU’s policy formulation process. Firstly, it has a quasi-monopoly of legislative initiative. Secondly, the Commission is the institutional memory of the EU: its function as a “building-block” ensures legislative consistency over time because “the time horizon of its administrative action is almost unlimited.”1 Thirdly, the European Commission has assembled unparalleled policy expertise which is better safeguarded against the electoral fate than that of members of other institutions. Fourthly, the European Commission marks the beginning of a path-dependent process: the overwhelming majority of proposals for directives lead to an adoption of a directive2 – and large parts of the initial proposal are likely to survive the inter-institutional bargaining without substantial changes.3 Once a proposal for a directive has left the Commission, the political bargaining process is locked in on a narrowly defined path-dependent policy-making process. The interinstitutional bargaining is focused on details rather than on the broad policy choices. Fifthly, the Commission manages its policy

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proposals both with regards to its mediating function and to its own interests, defined early on in the interservice consultations.

Concentrating on the influence of expertise on the Commission is a promising research area because of the openness towards and dependency of the system on expertise. Whether one conceptualizes the EU as a regulatory state\(^4\), the Commission as a technocratic bureaucracy or as a political organization – expert knowledge is essential for the delivery of the goals of the Commission.\(^5\) Some even go as far as to state a “bias in favor of the representation of expertise”.\(^6\) Notwithstanding definitional problems, the sheer numbers also speak to the detriment of more in-depth analysis of the utilization of expertise in the Commission. 1999, an internal Commission document counted nearly 800 expert committees.\(^7\) Another study counted 851 committees with 501 sub-groups in 2003.\(^8\) The total number of expert group members in 2003 was estimated to be is over 50,000.\(^9\) The Commission itself acknowledges experts as having become “key actors of ‘governance’: either as proactive agenda-setters in their own right ... or, more often, as ‘resources’”.\(^10\) This paper aims to contribute to the current efforts to better assess and explain the beginning of the decision-making process in the EU. In many aspects, the influence of experts on the policy-formulation of the Commission remained so far as invisible – although the official decision-making process as laid down in the treaties (Art.251 etc.) is only “the tip of the iceberg”.\(^11\)

This paper develops a framework for analysis how a structure’s demand influences the actors’ supply of expertise. The framework is applied to a case study on the policy-design of the emissions trading scheme directive by the Commission. This case study has been chosen because it offers the possibility to analyse a relatively short period of time (1998-2001). It was a highly political proposal which at the same time was faced with the challenge of developing an answer to a highly complex and uncertain problem. Additionally, the policy developed was designed from the scratch. We can therefore expect to be able to deduct some insights about the functioning of expert knowledge within the Commission. However, the generalizability of the case study is naturally limited and will require further testing.

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\(^4\) Majone, Giandomenico: Regulating Europe, Routledge, London 1996
\(^5\) Boswell, Christina: The political functions of expert knowledge: knowledge and legitimation in European Union immigration policy, Journal of European Public Policy 15:4, June 2008:471
\(^8\) Larsson, T.: Precooking the European Union, Sweden: ESO Ministry of Finance 2003:15
\(^11\) Guéguen, Daniel and Rosberg, Caroline: Comitology and other EU committees and expert groups. The hidden power of the EU, Europe Information Service Publishing, European Public Affairs Series, Brussels 2004:11
Definitions

Before turning to conceptual questions and the analysis, a definition of ‘experts’ is necessary. Existing definitions seem to not capture the meaning of experts for the Commission. Van Schendelen defines in-house experts\textsuperscript{12} and Trondal offers insights about seconded national experts\textsuperscript{13}. These are, however, internal experts which are not the target of the consultation and outreach exercises of the Commission. This paper would like to focus on external experts.

Haas has put forward an interesting definition of experts, ‘epistemic community’, as a "network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area".\textsuperscript{14} Unfortunately for our purpose, he has established strict criteria for an epistemic community. Members of an epistemic community should share a set of normative and principled beliefs, causal beliefs, a consensual knowledge base, This presupposes a very consistent community of experts, resembling closely a social system with social rules and social sanction mechanisms.\textsuperscript{15} They are also supposed to share practices and patterns of reasoning, and a specific commitment to the application and production of knowledge.\textsuperscript{16} All the limiting conditions Haas established are too rigid for the purpose of this paper. Firstly, experts consulted by the Commission do not necessarily share beliefs. Secondly, the might not agree on a knowledge base. Thirdly, they will not be part of the same social system. They constitute, however, a transnational network from different disciplines and backgrounds.

The Commission distinguishes between in-house experts and external experts. It defines external expertise as multidimensional: it “may take many forms, including both scientific knowledge and that derived from practical experience. It may also relate to specific national or regional situations” or to stakeholders.\textsuperscript{17} With regard to stakeholders, however, the Commission “seeks the views of civil society groups and other interested parties because of the constituencies they represent, rather than because of the expertise they possess.”\textsuperscript{18} Stakeholders are therefore not experts – but the distinction might be difficult to draw, as much as the distinction between lay and professional knowledge is not easy to establish.

One of the core principles for the selection of expertise by the Commission is quality. The Commission demands excellence in terms of academic quality or in terms of practical knowledge. This corresponds to Haas’ first criteria of having a recognized,

\textsuperscript{12} Van Schendelen 2003.
\textsuperscript{13} Trondal, Jarle: Contending Decision Making Dynamics within the European Commission, Comparative European Politics 5, 2007:158-178
\textsuperscript{15} Haas, Peter M.: Introduction, 1992:20
\textsuperscript{16} Haas, Peter M.: Introduction, 1992:3
\textsuperscript{17} European Commission: Collection and Use of Expertise by the Commission - Principles and Guidelines: Improving the knowledge base for better policies, Brussels 2003:7,9
\textsuperscript{18} European Commission 2003:10
authoritative claim to policy-relevant knowledge. Furthermore, the Commission requires experts to act with integrity and as independently as possible. It is acknowledged that “no one is entirely ‘independent’” but vested interests distorting the advice should be minimized – and countered by ensuring pluralism in terms of interdisciplinarity, sectors, geographies, culture and gender. To capture the Commission’s preference for independence, a Radaelli quote from a different context illustrates the first priority base of expert knowledge. Experts, he writes, act not “on the basis of interest, but on the basis of knowledge.”

We would like to propose the following definition of expertise for the European Commission: Experts are outstanding scientists or practitioners which hold a 1) recognized, authoritative claim to policy-relevant knowledge; 2) they act as independently as possible from their vested interests on the basis of their knowledge and 3) they are external to the institution.

**Conceptual framework: an institutionalist approach**

This paper adopts an institutionalist perspective on the role of experts in the policy formulation of the Commission. Radaelli argues that defining knowledge in relation to agency makes the mistake of assuming that the political role of knowledge corresponds to the participation of specific actors: “I would argue that knowledge has less to do with specific actors than with the structure in which actors act. Actors operate in the knowledge structure of the policy process, taking for granted certain rules and norms and using shared paradigms.” Instead of advocating an institutionalist approach, Radaelli attributes the role of knowledge to logics or modes of policy-making (bureaucratic politics, politicization, technocratic logic, epistemic communities). Whereas he makes a valid argument about the link of knowledge agency to cognitive structures, this paper would like to take the argument further to institutional structures, building on Haas’ assumption that “the range of impact that we might expect of [...] expert communities] remains conditioned and bounded by [...] structural realities”.

Approaching the role of expertise from an institutionalist angle has not much tradition. However, we can build on some aspects agency-based approaches have pointed at. The advocacy coalition framework (ACF) is one of the most explicit agency-based approaches with a focus on policy learning in terms of the constraints to actors due to institutional structures. Sabatier calls these structures “basic constitutional structures”, “long term coalition opportunity structures” and “external system events” which are essential independent variables of his policy subsystems. Schlager attributes a

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19 European Commission 2003:11
20 Italics in the original, Radaelli 2003: 282
decisional bias to the institutional arrangements advocacy coalitions are facing.\textsuperscript{24} Advocacy coalitions have to act in organisational structures which facilitate policy-oriented learning with “\textit{institutional learning arrangements \ldots or hamper learning with} institutional learning constraints”\textsuperscript{25} Institutional structures in the ACF are considered as influential but they are only weakly operationalized in terms of how they actually structure the ability of the actors to facilitate learning. Openness of the political system, for instance, is too abstract as a concept when analyzing the role of experts within the policy formulation of one institution.

Radaelli argues that “institutionalization of ideas is the main factor at work when we move from the micro to the macro level” of explaining policy learning.\textsuperscript{26} Their importance would be given because “they give stability to shared causal beliefs, they set up structures of meaning, they create networks of actors, they constrain the perception of interests and of socio-economic change” and they allow for the interpretation of necessity and design of certain policies.\textsuperscript{27} Haas’ epistemic communities approach argues along similar lines when assuming that an epistemic community can only prevail in the phases of policy diffusion and persistence if it is able to install its members in or very close to the relevant institutions.\textsuperscript{28} Insofar, it seems to be promising to have a closer look at institutional factors.

\textbf{Conceptual approach: institutional functionality and demand-driven utilization of expertise}

Haas’ epistemic communities share with other approaches on the influence of experts and knowledge an implicit focus on the supply of knowledge. However, looking more closely into the demand side of expertise is equally promising with regard to the Commission. In doing so, approaches to interest representation are informative if one accepts the metaphor that “experts ‘represent’ expertise.”\textsuperscript{29} Bouwen proposes foundations for a new theory of access\textsuperscript{30}, drawing from the resource dependency perspective\textsuperscript{31} and the exchange

\begin{thebibliography}{99}

\bibitem{Radaelli1995b} Radaelli 1995: 178
\bibitem{Radaelli2003} Radaelli 2003: 281
\end{thebibliography}
Especially the dependency perspective is relevant for the Commission which depends on expert knowledge as a “crucial resource” for its functioning. The Commission will therefore primarily demand expertise in order to formulate effective legislation. Expert knowledge becomes the most important access good an actor can possess in the pursuit of influencing the Commission.

This analysis resonates well with other works on the role of science and experts on policy and international relations. In his influential introduction to epistemic communities, Haas takes recourse to the development of the state and international organisations towards a modern administration based on scientific rationality. In the face of policy issues of high complexity and technicality, experts are endowed with a natural “social power resource”. Especially under conditions of uncertainty, an administration’s demand for expertise is high. This emphasis on the needs of institutions can be captured, as this paper seeks to prove.

In short, we can build on a) Radaelli’s insight that knowledge utilization is conditioned by structures, b) Sabatier’s acknowledgement that institutions define the access possibilities for experts, c) Haas’ evaluation of an increased need for expertise of modern administrations, and d) Bouwen’s conceptualization of a demand-driven utilization of expertise. To understand the Commission’s usage of expertise in a specific case, we need to operationalize such a demand-driven process in a differentiated manner.

Expertise has three distinct functions for a bureaucracy: an instrumental function, a legitimizing function and a substantiating function (whereas the latter two are symbolic functions). Expertise in this context is instrumental for the Commission because it enables it to deliver its objectives (legislation). It is legitimizing because it increases its epistemic credibility. It is substantiating because it helps defending a policy choice under political contestation.

Boswell understands the Commission’s DGs as consistent organizations but Kingdon allows for an interesting differentiation. Like Sabatier and Haas, Kingdon accounts for the role small units of organisation (or individuals) play within different stages of policy-making. Additionally, Kingdon argues that three different dynamics (“streams”) of policy-making exist: the problem stream, the policy stream and the political stream. The problem stream often represents a “focusing event” which exemplifies the nature and extent of a problem. In the policy stream, ideas, policy options and problem solutions are tested, discussed, refined and diffused. The political stream is less a process of persuasion but of bargaining, a process where coalitions are built and concessions are negotiated.

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32 Levine, Sol and White, Paul E.: Exchange as a conceptual framework for the study of interorganizational relationships, Administrative Science Quarterly 5: 583-601
33 Bouwen 2002: 369; 379-82
38 Kingdon 2003:95
These three streams correspond in large parts to the understanding of a policy cycle in the epistemic community literature identified as follows: policy innovation (or development), policy diffusion, policy selection, policy persistence and policy evolution.39

Whereas Kingdon focuses on domestic policy-making, Adler and Haas shed light into international policy coordination. It might make sense to combine the two approaches when analysing the EU, a hybrid organisation between supranationalism, intergovernmentalism and sui generis political system. Kingdon’s problem stream is only partly covered by Haas’ policy innovation and will therefore be added to the stages of policy-making. The policy stream includes policy innovation and diffusion. The political stream includes policy selection and persistence. Policy evaluation could be placed in both the problem and the policy stream. We would therefore like to propose the following steps of policy-making: 1) problem definition, 2) policy innovation and diffusion, 3) policy selection, 4) policy persistence and 5) policy evaluation.

In the case of the European Commission, stages 1) to 4) are completed before a proposal for a directive is transmitted to the Council and the European Parliament. With regard to the role of expertise in the policy-making of the European Commission, a focus on steps 1) to 4) within the institution is sufficient if the policy is developed from scratch. If the policy-making basically represents a revision of an old directive, step 5 is being completed before the other four steps can be taken.

It should be noted, however, that a linear progression from one stage to another cannot be assumed. The processes can easily co-exist and be informed by one another at different points during the policy-making, for instance when windows of opportunity open up.40 One of the most pronounced criticisms of analysing policy-making through the lenses of a policy cycle is that this obscures the difficulties of distinguishing the different stages in practice. The Commission, however, has at least identified clear procedures which correspond closely to the stages proposed here: identifying the issue, framing the problem, shaping options, policy proposal, implementation and review.41

The Commission fulfils different functions throughout its policy-making process. It is an agenda-setter and problem interpreter during problem definition and policy evaluation. It is a policy-designer during policy innovation and diffusion. It is a decision-taker during policy selection and persistence. Considering that different stages of policy-making reflect different institutional functionalities, the critical resource the Commission will demand might change throughout its policy-making process. The policy stages influence the institutional functionality of the Commission, which in turn impacts the functions expertise can fulfil for the Commission. Structure, in this sense, defines to a large degree the potential for influence of agency. The policy-making stages and their influence on the institutional functionality of the Commission are assumed to be independent variables in relation to the dependent variable of expert influence.

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40 Kingdon 2003:165,174
41 European Commission 2003:10
Operationalization: policy stages, institutional functionality and utilization of expert knowledge

In order to operationalize this relationship, we need to substantiate which roles experts or expertise can play and link these roles to the different institutional functionalities. In a simplified fashion, the following relationship is assumed, building on a categorization of Radaelli and a distinction offered by Weiss:

problem definition and policy evaluation – data
policy innovation and diffusion – ideas
policy selection and persistence - argument

It becomes apparent immediately, that such a structure is moving between the poles of ‘puzzling’ and ‘powering’. This paper accepts the notion of bounded rationality, and in such a context that actors act rationally as well as that actor’s preferences are shaped by discourse and knowledge. It is hoped that this way it is possible to at least partly counter the natural tendency of knowledge utilization studies to “overlook the contribution of knowledge to the structuring of political discourse in the long run.”

Problem definition and policy evaluation takes places at the beginning of a (new) policy-making exercise. As a rule, a Directorate-General (DG) is responsible for these stages. One unit with few Commission officials which are functionally responsible organise the process. They might consult experts in forms of workshops, conferences or a formal consultation process.

For the stages of problem definition and policy evaluation, the institutional functionality of the Commission is one of agenda-setting and problem interpretation. To exercise this function, the Commission needs corresponding expertise. The European Commission, despite its in-house expertise, needs external contributions to fully understand a problem’s scope, causes and effects. This is especially valid for situations where the Commission lacks knowledge in the face of a new problem. In these cases, it is necessary to assess validity claims, and information about extent, causes and consequences of a problem are demanded.

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42 Radaelli 1995: 176
45 Radaelli 1995: 178
47 Niemann 2004:399
48 Dimitrov, R.S.: Knowledge, power, and interests in environmental regime formation, International Studies Quarterly 47:1, 2003:123-151
Insofar, experts reduce and help to manage uncertainty and cognitive complexity. This management function is of particular importance in the face of indiscernible risks: The Commission is proposing legislation in a risk society.\textsuperscript{49} The Commission seeks for data gained from monitoring risks. It has defined clear principles of its risk management, which can only be adhered to on the basis of expert knowledge: “proportionality, non-discrimination, consistency, examination of the benefits and costs of action or lack of action, examination of scientific developments.”\textsuperscript{50} One part of risk management is also to be prepared on the basis of early warning exercises\textsuperscript{51} and to be informed about the interrelatedness of a risk with other processes.\textsuperscript{52} Expert reports which describe a threat or risk for a first time or with an unknown urgency or cause-effect relationship\textsuperscript{53} can therefore easily become agenda setters.\textsuperscript{54}

By mediating scientific findings into a political process, experts fulfil an important cognitive function. They provide data and their interpretation. They deliver accepted, authoritative and objective knowledge.\textsuperscript{55} Epistemic communities literature goes as far as proposing that experts shape interests by framing issues for debate.\textsuperscript{56} However, principal-agent literature points out that the information asymmetry which is the very reason for the Commission to establish a principal-agent relationship with experts poses questions of control: Because the experts cannot be assumed to always act in the Commission’s interest, a goal conflict can emerge which the Commission will aim to control.\textsuperscript{57} The Commission will therefore aim at finding ways to either control their own learning or to isolate themselves from unwanted input. A distinction between endogenous learning (“that which originated from, or can be seen to be controlled by, the Commission decision makers”)\textsuperscript{58} and exogenous learning (not controlled by the Commission) might be informative in this context.

In terms of evaluation, experts can also help to explain policy failure and its underlying assumptions, and provide alternative explanations of a given problem.\textsuperscript{59} They provide

\textsuperscript{49} Bulkeley, Harriet: Governing climate change: the politics of risk society?, Transactions of the Institute of British Geographers 26, 2001:430-447
Beck, Ulrich: Risk Society: Towards a New Modernity, Sage, New Delhi 1992
\textsuperscript{50} European Commission: Communication from the Commission the the Council, the European Parliament, The Economic and Social Committee and the Committee of the Regions: Science and Society Action Plan, CP; (2001) 714 final, Brussels 04.12.2001: 20
\textsuperscript{52} Haas, Peter M.: Introduction, 1992:4
\textsuperscript{53} Haas, Peter M.: Introduction, 1992:384
\textsuperscript{54} Haas, Peter M.: Introduction, 1992:14
\textsuperscript{55} Haas, Peter M. 2004:115-36
\textsuperscript{56} Haas, Peter M. (ed.): Knowledge, Power and International Policy Coordination, University of South Carolina Press, Columbia 1997:2
\textsuperscript{57} Dunlop, Claire A. and James, Oliver: Principal-Agent Modelling and Learning: The European Commission, Experts and Agricultural Hormone Growth Promoters, Public Policy and Administration 22, 2007:405
\textsuperscript{58} Dunlop and James 2007:410
\textsuperscript{59} King, Michael R.: Epistemic Communities and the Diffusion of Ideas: Central Bank Reform in the United Kingdom, West European Politics 28:1, January 2005:94-123
external evaluation knowledge which might otherwise not be accessible for Commission officials.

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</tr>
<tr>
<td>policy evaluation</td>
<td>Agenda-setting Problem interpretation</td>
<td>Explain policy failure Provide alternative explanations of a problem Deliver external knowledge Cognitive</td>
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Policy innovation and policy diffusion takes places within the DGs as well. One lead DG will take responsibility for facilitating the process with associated DGs. The process is managed by one desk officer, who will eventually draft the first proposal for a directive. This first draft is then, again, discussed in inter-service consultations with other DGs and the Legal Service. The desk official (or the responsible officials in the other DGs on own initiatives) might consult experts on an ad hoc basis, organise workshops, conferences or a formal consultation process. This is also the stage for the conclusion of impact assessment exercises.

For the stages of policy innovation and diffusion, the institutional functionality of the Commission is one of policy design. To exercise this function, the Commission needs corresponding expertise. Experts can provide options, goals and strategies for a given policy design. They are particularly useful for the Commission during their impact assessment exercises. The Commission defines an impact assessment as a “process of systematic analysis of the likely impacts of intervention by public authorities” which implies a first selection of policy options and an analysis of their short and long-term impacts on the economy, the society and the environment for selected policy options. The precautionary principle assumes an important role in this context. Expertise is also needed to assess the interrelations with other policies, events and the consequences of chosen policies. Experts explain the consequences of scientific developments for a

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policy. Expertise is also able to identify winners and losers of a given policy. However, the Commission is very clear that impact assessments are designed to provide insights about the consequences of policy choices and not to make political judgements.

Experts can furthermore act as “channels of information exchange, learning, imitation, and for the explicit transfer of legal concepts and arguments”. This function can range from finding solutions for technical problems via offering ideas to offering entire blueprints for a policy design. In this case, experts might either be conceptualized as policy entrepreneurs or understood as an outsourcing mechanism which endows the Commission with “extended legitimacy” in the face of unpopular policy options. This already points to the strategic use of expertise in the policy development phase.

Experts offer alternative options for policies, but they might also be able to limit the alternatives to be considered: “If rationality is bounded, epistemic communities may be responsible for circumscribing the boundaries and delimiting the options.” The influence of experts in a more strategic environment is assumed to be more limited, however, than in the more cognitive environment of the first phase of policy-making. The Commission will already have developed a set of (potential) policy preferences early on. It is likely to judge expert input very carefully. It states explicitly that knowledge “used for policy-making and public debate should not only be excellent from a scientific point of view; it also needs to be ‘socially robust’, responding to policy, social, economic needs or concerns.” It will therefore be careful to choose whom they ask for which kind of service and possibly even aim to control the supply of advice given.

Any knowledge provided by experts will need to be ‘usable’, that is “accurate, and politically tractable for its users.” Haas mentions the criteria of adequacy of facts, contribution to a better understanding, legitimacy outside the policy-shaping community, and effectiveness to shape the debate which are used to assess an experts’ input. Kingdon offers a comparable set of criteria: “technical feasibility, value acceptability within the policy community, tolerable cost, anticipated public acquiescence and a

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63 Haas, Peter M.: Banning chlorofluorocarbons, 1992:196
64 Haas, Peter M.: Introduction, 1992:15
65 European Commission 2002:3
67 Van Waarden and Drahos 2002:931
69 Kingdon 2003
72 European Commission: Liberatore Report, 2001:22
73 Dunlop and James 2007:403-22
74 Haas, Peter M. 2004:115-36
reasonable chance for receptivity among elected decision makers” which need to be fulfilled in order to be “considered as serious, viable proposals.”

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| policy innovation   | Policy design               | Inform about consequences of policy options (impact assessments)  
Policy advice (technical, ideas, blue-prints)  
Provision of alternative options or limitation of policy options  
Legitimacy through outsourcing |
| policy diffusion     |                             |                          |

During policy selection and persistence, the higher levels of hierarchy within the DGs become more involved. Whereas there might have been coordination meetings even before, head of units, directorate generals and Commissioner’s cabinets, as well as the College of Commissioners discuss the proposal. Interservice consultations, or rather negotiations, and so-called ‘special chef’ meetings between cabinet members constitute the fora for policy selection and persistence. If a policy does not survive the scrutiny tests on its way through the hierarchy, it is re-modelled (policy innovation).

For the stages of policy selection and persistence, the institutional functionality of the Commission is one of decision-taking. To exercise this function, the Commission needs corresponding expertise. Expertise about facts and consequences is already provided for, whereas insights about the political acceptability and the positions of other actors are still needed. This knowledge can normally not be provided by outsiders like experts. The knowledge used in the preceding stages of policy-making will only be influential under limiting conditions. Experts are less likely to have access to the decision-makers, or if so, they will be carefully selected – a classical example of highly endogenous learning.

When assuming a rationalist dynamic of decision-taking, knowledge will be used as “tools, weapons or hooks.” In such a rational bargaining situation, the influence of expertise is seen as severely limited: “The ideas of an epistemic community are only adopted when they serve political ends.” During policy selection, expertise might become a tool for building new alliances on the basis of a redefinition of interests. It is in this context, that the idea of institutionalisation, a “usurpation” of important key positions by members of an epistemic community is being brought in. It might also be used as a weapon to contest and de-legitimise arguments. Knowledge is a power resource for experts – and knowledge can be used accordingly in a political bargaining process as

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76 Kingdon 2003:131  
77 King 2005:98  
78 King 2005:118  
well, for instance to nullify arguments.\textsuperscript{80} New, pressing scientific evidence could therefore change dynamics of negotiations.\textsuperscript{81} Especially in policy persistence, expertise can be used as a hook to justify ex post a selection undertaken for different political reasons. Enhancing the credibility and legitimacy of decisions, for instance, features high in the documents of the Commission on the use of expertise.

Expertise thus becomes an instrument: as a source of authority and legitimacy, as a justification for unpopular policies or a policy change, as an argument in negotiations, or even as a mechanism for delaying or substituting action.\textsuperscript{82}

On the other hand, the cognitive function of expertise is still important under the assumption of bounded rationality and path-dependency. If interests are shaped and negotiations are conducted on the basis of expert input, “operational codes, and cognitive maps shapes decision makers’ responses not only by influencing the ways in which they interpret the world but also by erecting barriers to the types of information that they consider valuable.”\textsuperscript{83}

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<td>Hook to ensure credibility, justification and legitimacy</td>
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<td>policy persistence</td>
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In conclusion, six policy-making stages correspond to three different institutional functionalities. The three institutional functionalities correspond to different roles of expert knowledge. When moving upwards the hierarchy and towards the end of the policy-making within the Commission, the utilization of expert knowledge shifts on a continuum from one extreme of cognitive functions to bargaining functions. Whereas it is obvious, that no extreme is present in its pure form during any stage of the process, there seems to be a dominating role of expert knowledge which is a dependent variable of the institutional functionality of the Commission’s policy making. The next section aims at testing this hypothesis with a case study on the Commission’s policy-formulation of the emission trading scheme (ETS) of the EU.

\textsuperscript{80} Haas, Peter M.: Banning chlorofluorocarbons, 1992:211
\textsuperscript{81} Haas, Peter M.: Banning chlorofluorocarbons, 1992:202
\textsuperscript{83} Haas, Peter M.: Introduction, 1992:29
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<td>Hook to ensure credibility, justification and legitimacy</td>
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<td>policy selection</td>
<td>Decision-taking</td>
<td>Mechanism to delay or substitute action</td>
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<td>Restrict cognitive functions of actors</td>
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<td>policy persistence</td>
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<td>Argumentative</td>
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<td>policy evaluation</td>
<td>Agenda-setting</td>
<td>Explain policy failure</td>
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<td>Problem interpretation</td>
<td>Provide alternative explanations of a problem</td>
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<td>Deliver external knowledge</td>
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*Cognitive*  

*Strategic*  

*Argumentative*
Case Study: The Commission’s policy-formulation of the emissions trading scheme of the EU

The next part aims at applying the framework developed above to a case study. The analysis of the case study ETS is based on past research. For the purpose of this article, primary sources such as institutional documents and expert studies have been assessed, and academic publications have been reviewed. The findings were especially substantiated by some interviews with Commission officials who were involved at different levels of the hierarchy (from the desk officer to the cabinet member) in the drafting of the proposal.

Problem interpretation: IPCC proves climate change and sets the agenda

As hypothesized before, the institutional functionality of the Commission on the problem interpretation phase will require expert knowledge about the existence, the scope, causes and consequences of a problem. It should therefore be possible to trace according inputs into the process of problem definition. Climate change is typical example for a problem emerging in Beck’s risk society.\(^{84}\) \(\text{CO}_2\) and other climate gases are imperceptible to the human senses and thus difficult to experience as a risk. Climate change is an experience “indeterminately distanciated over space and time”.\(^{85}\) Risks of such abstract dimensions stretch “social and natural relations of cause, effect and responsibility”\(^{86}\) – risk and cause cannot be easily attributed to each other. In such a context, risk assessment must be based on scientific interpretations of causes.

In the case of climate change, this expertise was developed beyond the control of the Commission within the Intergovernmental Panel on Climate Change (IPCC). The scientific basis for international and European action on climate change was laid at the latest with the Second IPCC Assessment Report 1995 which clearly established that climate change was reality and at least partly caused by mankind.

The IPCC reports provided a clear scientific consensus, easily available to politics. A denial of the problem of climate change became increasingly difficult. The Third IPCC Assessment Report predicted a rise of temperature of up to nearly 6\(^\circ\) Celsius and elaborated potential consequences. Over time, the reports provided information about the extent, the causes and the consequences of climate change. As the reports are subject to intensive peer-review, they also had a high credibility. In short, the IPCC delivered authoritative knowledge about climate change. This knowledge was also increasingly covered by the media.\(^{87}\) The Commission, already working on climate change for at least a decade, embraced the IPCC findings as “policy relevant”.\(^{88}\) At the same time,

\(^{84}\) Beck 1992: 21
\(^{85}\) Bulkeley 2001:432
\(^{86}\) Bulkeley, op.cit., p.432
\(^{87}\) Carpenter, Chad: Businesses, green groups and the media: the role of non-governmental organizations in the climate change debate, in: International Affairs 77:2, 2001:319
\(^{88}\) Telephone Interview with Dr. Saleemul Huq, IPCC, 11.04.2008
commissioned studies (e.g. by the European Environmental Agency) provided the Commission with information which predicted a significant trend towards more emissions in Europe.\textsuperscript{89} Action was proven to be necessary by scientific findings. The general agenda was therefore set by scientific reports and the problem framed by expertise.

In conclusion, expert knowledge was utilized to assess the existence, the scope, the causes and consequences of the problem of climate change. It helped to assess the risks associated with the problem. Expert knowledge also served in an agenda-setting function by clearly proving that climate change was (partly) man-made. Studies confirmed both the global and the European responsibilities.

**Policy innovation: blue prints, policy advice and consultation exercises**

The issue of an emissions trading scheme (ETS) emerged in the context of the negotiations on the Kyoto Protocol and was not a preferred policy option for the Commission. The European Union agreed in Kyoto 1997 to engage in a reduction of its greenhouse gas emissions by 8% until 2008-12 compared to the base year 1990. Art.17 of the Kyoto-Protocol foresees the establishment of an emissions trading mechanism to fulfil this commitment. An ETS creates a market in the environmental policy field. Its principle is to grant a limited number of pollution permits to the industry which are then traded among installations. By limiting the amount of permits overall available, an ETS can guarantee the environmental outcome. Such a system distributes the economic costs in an efficient way: “reductions in emissions are made by those polluters who can do so at least cost, being compensated by polluters who face higher costs of abatement.”\textsuperscript{90}

Art. 17 was a concession to the United States which was initially fiercely resisted by the EU\textsuperscript{91}, and in particular the Commission\textsuperscript{92}, because such a market-based approach to environmental regulation did not correspond with the existing regulatory framework. Accordingly, the Commission had difficulties to integrate the new policy paradigm into the existing body of directives when it began the policy-formulation for the ETS directive: “The Kyoto Mechanisms are fundamentally different from the way the European Community and its Member States have organised their environmental policy over the last decades. [...] there is hardly any experience in the Community with instruments such as the Kyoto Mechanisms.”\textsuperscript{93} On the other hand, ETS was a way to

\textsuperscript{93} European Commission 1999:14
circumvent a stalemate on energy taxation which lingered on for nearly a decade when the Commission published its ETS proposal.\footnote{Dreger, Jonas: The influence of environmental NGOs on the design of the emissions trading scheme of the EU – An application of the Advocacy Coalition Framework, Master Thesis, College of Europe, June 2008:58}

The institutional functionality of policy design is expected to require expertise on policy options, policy designs and their potential impacts. It should therefore be possible to trace according inputs into the following policy process. The EU began the legislative process relatively soon after the Kyoto negotiations based on the international mandate and with an eye on the uncertain ratification in other protocol parties. Three possible pathways to an ETS were discussed in the policy-formulation process in the following order: a top-down UN scheme, a collection of bottom-up member state schemes or a regional EU-level scheme.\footnote{Zapfel, Peter and Vainio, Matti: Pathways to European Greenhouse Gas Emissions Trading History and Misconceptions, Fondazione Eni Enrico Mattei Nota di Lavoro 85.2002, retrieved from http://www.feem.it/web/activ/_activ.html, 15.03.2008} During the first discussion phase, American experts significantly shaped the European debate. Staff from the Environmental Protection Agency, academics from the MIT and other universities, staff from think tanks like the Center for Clean Air Policy and from NGOs like Environmental Defense were promoting ETS and shared their experience.\footnote{Zapfel and Vainio 2002:7} They effectively shaped the debate about the policy instrument and its advantages based on their experience with permit tradings in US programmes on acid rain, sulphur dioxide and lead.\footnote{Zapfel and Vainio 2002:8}

Once it became apparent that an UN-wide solution was not within reach, a lot of national actors started discussing national solutions. In 1998 and 1999, Denmark, the UK and the Netherlands, Sweden, Norway, as well as BP established or were in the process of establishing emissions trading schemes.\footnote{Zapfel and Vainio 2002:9} They based their efforts on studies commissioned to experts who substantially widened the discussion to concrete designing options: “The interest in domestic trading resulted in an extension of the vocabulary in the trading discussion as new terms like upstream vs. downstream trading, allowance vs. Credit trading, auctioning vs. grandfathering, absolute vs. relative targets, or caps on growth”\footnote{Damro and Méndez 2005:257} It can therefore be safely stated that external experts were instrumental in providing policy advice on technical issues and design options.

Following the input of European experts and the development of European solutions, the debate increasingly focused on European specifics. The influence of US experts declined, with the exception of experts from BP who came to impact the debate heavily with their practical experience. Additionally, the UK–Emissions Trading Group (which was also led by business) made recommendations which “induced an even wider recognition of emissions trading as a real policy alternative.”\footnote{Zapfel and Vainio 2002:9}
In this second phase, experts shaped a European debate with their practical insights and increasingly also with a provision of blueprints and general policy design options. The Commission felt increasingly pressured to prevent less efficient domestic or small-scale trading schemes: “we have to get involved in emissions trading […] we cannot let others dictate the rules.”\(^{101}\) The preparations for the ETS legislation started parallel to the national developments in 1999 with an aim of putting a system into place by 2005 – seven years before the global system was supposed to operate.\(^{102}\)

The complexity and the level of technicality of the issue presented a challenge to the Commission. All actors in the political process “were not ready, and everybody started from the scratch. We were working on the fly.”\(^{103}\) Zapfel, an expert for ETS in America who was hired by the Commission in January 1998, identifies 7 ‘misconceptions’ which dominated the debate in the early design phase.\(^{104}\) Most of them were of major importance: To give some examples: it was initially assumed that governments, and not companies would be the trading actors; it was understood that only sellers benefit from the scheme; it was expected that every industrial plant would have an individual cap on emissions. All these conceptions had to be tackled with expert knowledge and in lengthy discussions.

The Commission published a Green Paper on emissions trading in March 2000 which marked the beginning of a consultation process. The Green Paper in particular outlined several policy options, for instance of how binding the legislation should be or how the allowances should be allocated. In reaction to the Green Paper, the Commission received about 700 pages of comments.\(^{105}\) Next to the consultation exercise, the Commission established a working group in its European Climate Change Programme which met from July 2000 to May 2001, and again in September 2001. In October 2001, the Commission published its proposal for a Directive. This working group with 30 stakeholders from member states and interest groups recommended a European scheme instead of allowing several national solutions to emerge and gave further concrete recommendations.\(^{106}\)

In this context, it should be noted that the stakeholder group is one example for the difficulty of the Commission of actually adhering to its own definition of experts. The boundary between independent and “acting in an independent manner” is very difficult to draw. It additionally seems that the consultation exercise was also used as a communication exercise. Especially the working group fulfilled the function of creating a dialogue among stakeholders and gain insights into their arguments. One indicator for this function is the fact that the conclusions of the working group were published nearly at the same time as the proposal for the directive and thus could not have a major impact

\(^{102}\) Damro and Méndez 2005:256
\(^{103}\) Interview with Tomas Wyns, Climate Action Network, Brussels 18.04.2008
\(^{104}\) Zapfel and Vainio 2002:13-25
\(^{105}\) Wettestad 2005:12
\(^{106}\) Zapfel and Vainio 2002:11
on its design. Consultation of stakeholders is also an instrument to prepare for the decision-taking function of the Commission within the policy-making stages of policy selection and persistence.

Parallel to the consultation exercises, the Commission used other expertise in preparing the ETS directive. This expertise corresponds more clearly to the definition of expertise provided above. The Green Paper already relied on a study commissioned to the National Technical University of Athens on the economic implications of an ETS. This study paved the way for pursuing the policy option ETS: it became clear that an implementation of the Kyoto commitments via an ETS could reduce the implementation costs by 1.7 billion a year. The impact assessment served the function of informing the Commission about potential impacts of its policies. This fact corresponds well with the policy design functionality.

As the Commission lacked experience with the policy instrument as such, it also had difficulties to integrate it into its existing legal acquis communautaire. It consequentially contracted a London-based NGO and think tank called FIELD (Foundation for Environmental Law and Development) to provide a study on designing options for the ETS. The Commission had the need for expertise, commissioned external experts and subsequentially heavily relied on the results when writing the Green Paper. The Green Paper argues very similarly as the FIELD study on the scope, equity level trading, auctioning, interventions and penalties – sometimes even with the same wording.

Same processes were organized in parallel. Not only did DG Environment organize its stakeholder working group meeting and consulted with other DGs, it also commissioned FIELD for a second study at the same time in 2001. FIELD was asked to “\(\text{[e]}\text{xamine and explain the possible legal provisions of a Directive […] as outlined in the Green Paper}\)”. FIELD went further and even proposed an entire directive to DG Environment. FIELD, although a member of the NGO community, was recognized as acting in an independent manner and thus trusted enough to take their proposal as the very first draft. The final draft proposal by DG Environment is in parts literally copied from the study, whereas other parts underwent a complete overhaul. Main features of the study were accepted, for instance: a cap-and-trade format on the basis of the IPPC Directive, the legal basis, the scope, the penalties and the exclusion of CDM/JI mechanisms. The final directive, however, did include more greenhouse gases and chose

107 Interview with Dr. Joachim K. Ehrenberg, European Commission, Brussels 18.04.2008
110 Dreger, Jonas: The influence of environmental NGOs on the design of the emissions trading scheme of the EU – An application of the Advocacy Coalition Framework, Bruges Political Research Papers 8, September 2008
112 Telephone interview with Peter Vis, European Commission, 23.04.2008
a different approach on the allocation of allowances. The desk officer for the ETS directive, Peter Vis, argued that “you cannot underestimate the importance of the FIELD study” in some aspects, as well as the importance of a study by the Center for Clean Air Policy.

To summarise: The Commission did not have the legislative experience and expertise to implement the policy option of ETS without external support. Experts from the U.S. and from business decisively shaped the first debates about ETS in Europe. European national experts provided studies with clear policy design options which shaped the subsequent thinking in the Commission. Blue prints by external experts were used in drafting the first proposal for a directive. Impact assessments were commissioned to external experts to pave the way for ETS as a policy option. Consultation exercises with experts and stakeholders were used by the Commission to facilitate a necessary dialogue and build consensus.

Policy selection and persistence: instrumentalisation of expertise and mistrust

The institutional functionality of policy selection and persistence is expected to require expertise as tools, hooks or weapons. Corresponding traits should be therefore possible to identify in these stages of policy-making. The Commission’s policy-making is fragmented into different DGs which all have their own priorities and perspectives. Horizontal policy proposals like the ETS thus can face a “rocky” path on their way to adoption by the College of Commissioners. DG Environment took the sole lead on the ETS proposal, although DG Enterprise had initially aimed for having the co-responsibility. DG Environment had to coordinate with the DGs for taxation, energy, internal market, economic and financial affairs, competition, enterprise and the Commission’s legal service. Interservice consultations are based on the principle of consensus: agreements are achieved at one level and the points of disagreements are passed on to the higher hierarchy. This implies a shift from technical questions to political questions and an increased politicization as the proposal moves up the hierarchy.

The interservice consultations were overshadowed by the uncertainties regarding the ratification of the Kyoto Protocol and a number of DGs were hesitant, especially DG Transport and Energy and DG Competition. DG Enterprise pushed for more studies on the economic impact of the ETS, which was an attempt to delay action. Expertise was thus used as a tactical asset. The ETS directive was also intensely negotiated at the cabinet level, and an oral debate in the College of Commissioners took place. One decision taken was for instance the anticipatory renouncement of completely free

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113 Telephone interview with Peter Vis, European Commission, 23.04.2008
115 Dreger, Jonas: The influence of environmental NGOs on the design of the emissions trading scheme of the EU – An application of the Advocacy Coalition Framework, Bruges Political Research Papers 8, September 2008
116 Interview with Dr. Joachim K. Ehrenberg, European Commission, Brussels 18.04.2008
allocation of the emission permits\textsuperscript{117} – although this might have been the economically and environmentally best solution. This resonates well with Haas’ and Kingdon’s assumption of political feasibility criteria in assessing expert knowledge utilization.

One Commission official expressed his frustration about the political interference on the policy work as follows: “The political acceptability of a proposal becomes part of the policy-formulation debates far too early. The anticipation is pre-mature, and content-oriented work becomes difficult. ... Especially the Director Generals and the Commissioners are very political figures.”\textsuperscript{118}

It is interesting to note that Commission officials in interservice consultations do not trust studies by interest groups but make sure that they have in-house studies to compare the data with. Expertise in a bargaining situation seems to be subject to distrust on the basis of an assumed lack of independence. At a later stage in the decision-making process (2002), the Commission sentiments towards business-funded studies surfaced in an exchange of open letters to the editor of the European Voice between Commissioner Wallström and business interest representatives.\textsuperscript{119} Wallström effectively accused business to work with inaccurate data. Expert studies in a bargaining situation serve as argumentative weapons.

In June 2001, Commissioner for Environment Wallström reacted to political pressure by Commissioner for Enterprise Likkanen and Commissioner for Competition Monti, as well as to hesitancies in DG Energy and Transport. She decided to postpone the publication of the draft proposal and to engage in another stakeholder consultation until September. This is the time when the allocation of allowances was overhauled again to be made more industry-friendly. Expertise, if one wants to call stakeholders experts in practical matters, served to make the proposal politically more acceptable. This is one of the few instances where it is possible to somehow trace the usage of expertise as a tool to build new alliances.

Other major changes were also a subject to political consideration. Two days before the publication of the draft directive, for instance, Commissioner Wallström decided to delete an opt-out clause from the directive which was initially designed to appease, amongst others, Germany - “and for the next ten months, the German delegation spend their life on getting it back in”\textsuperscript{120} instead of focusing on the method of allocation. These and other decisions were made on the basis of political considerations, not expertise.

Expertise in the decision-taking phase was used as a mechanism to delay political action and clearly subordinated to political considerations. It served as a tool to create new alliances and as a weapon and argument in the negotiations. The function of a hook to

\textsuperscript{117} Telephone interview with Dr. Henning Arp, European Commission, 08.04.2008
\textsuperscript{118} Interview with a Commission official
\textsuperscript{120} Telephone interview with Peter Vis, European Commission, 23.04.2008
ensure credibility and legitimacy could not be directly traced here. This does not necessarily mean that the assumption is not met but encourages looking beyond the policy-formulation process itself. It would be no surprise to find the Commission using expertise knowledge as a hook in negotiations with the Council of Ministers.

Conclusions

The paper has argued that the Commission’s utilization of expertise depends on its institutional needs. We have identified broadly three different functions which the Commission fulfills during its policy-formulation process: problem interpretation, policy-design and decision-taking. These three functions assume dominance at different stages in the policy-formulation process. Each of these functions requires a different utilization of expert knowledge in order to be successfully fulfilled. The problem interpretation function requires a cognitive utilization of expertise; the policy design function requires a strategic utilization of expertise and the decision-taking function requires an argumentative utilization of expertise.

The case study on the policy-formulation of the emissions trading scheme has broadly confirmed the assumptions. Expert knowledge was utilized to assess the existence, the scope, the causes and consequences of the problem of climate change. It helped to assess the risks associated with the problem. Expert knowledge also served in an agenda-setting function by clearly proving that climate change was (partly) man-made. This was arguably the stage in policy-making where experts acted most independently from the Commission: their target group was a bigger community of policy-makers.

The Commission did not have the legislative experience and expertise to implement the policy option of ETS without external support. Experts from the U.S. and from business decisively shaped the first debates about ETS in Europe. European national experts provided studies with clear policy design options which shaped the subsequent thinking in the Commission. Blue prints by external experts were used in drafting the first proposal for a directive. Impact assessments by external experts paved the way for ETS as a policy option. Consultation exercises with experts and stakeholders were used by the Commission to facilitate a necessary dialogue and build consensus. The usage of expertise in this phase was either directly commissioned by the institution or embedded in a consultation exercise. In the latter stage, complete independence of the expertise provided was not assumed anymore.

Expertise in the decision-taking phase was used as a mechanism to delay political action and clearly subordinated to political considerations. It served as a tool to create new alliances and as a weapon and argument in the negotiations within and with the Commission. The function of a hook to ensure credibility and legitimacy could not be directly traced here. This does not necessarily mean that the assumption is not met but encourages looking beyond the policy-formulation process itself. It would be no surprise to find the Commission using expertise knowledge as a hook in negotiations with the Council of Ministers. Expertise in this phase was less often used and if so, than under conditions of argumentative rationality.
It seems that a shift from an utilization of expert knowledge within the Commission can be found: from data to idea to argument as the policy proposal moves towards its finalisation and as the policy-formulation becomes more political. Clear-cut distinctions between the phases are, however, not possible to make – different functions influence each other and may conflict at different stages.

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