

European Union Environmental Governance in Transition—Effective? Legitimate? Ecologically Rational?

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This study chronicles the evolution of EU environmental governance to ascertain how it has changed over time and where it stands today in terms of effectiveness, legitimacy, and ecological rationality. The evidence suggests that EU hierarchical environmental governance became increasingly effective and legitimate during the 1970s and 1980s. However, many contend that these qualities have declined since the early 1990s. In response, the EU has made rhetorical and legal commitments to “new modes of governance,” but in practice environmental governance has remained predominantly hierarchical. This paper contends that EU policy is more effective than is commonly believed and that legitimacy derives more from normative consensus and legalization than perceptions of policy effectiveness. Moreover, EU environmental effectiveness and legitimacy potentially will be further enhanced with a more complete transformation to the new modes of governance which coincide with our understandings of ecological rationality.

Introduction

Many analysts contend that the effectiveness and legitimacy of the European Union (EU) is at an all-time low, and its member states are failing to fulfill their professed goals to achieve sustainable development, to implement and comply with environmental legislation, and to integrate environmental objectives across all policy areas. This paper chronicles the evolution of EU environmental governance in terms of the polity’s changing legal foundations and institutional capacities, principles and discourses, decision-making processes, and policy instruments to ascertain how EU environmental governance has changed over time and where it stands today in terms of effectiveness, legitimacy, and ecological rationality.

Environmental matters were not addressed in the 1957 Treaties of Rome establishing the European Economic Community, and environmental goals did not achieve treaty status until the 1987 Single European Act. Over time, the original guiding hierarchical, technocratic, and scientific discourses have been called into question. The predominantly intergovernmental body has changed to include substate, nonstate, and global participants in decision-making networks. Environmental policy-making processes began as relatively ad hoc, fragmented, top-down, and regulatory in nature, but gradually “new modes of governance” (NMG) entered the lexicon. Although the evidence suggests that EU environmental policy improved in effectiveness and legitimacy during the 1970s and 1980s, analysts warn of decline in these areas since the early 1990s, and policymakers have attempted to put into place more inclusive, cooperative, integrated, and context-specific procedures and processes. While these participatory and holistic commitments conform to some ecologically-rational prescriptions, in practice most EU environmental policies remain hierarchical and regulatory in nature (Jordan et al. 2005:489).

The EU has faced different environmental challenges along its evolutionary path, so assessing policy effectiveness is a moving target in terms of definition and indicators. During the 1970s through the mid-1980s, the primary objectives were to bring environmental protection to the agenda of the economic organization, to constitutionalize environmental objectives to a

legal status equal to economic integration and growth goals, and to build institutional capacity. Once those goals were achieved, the organization effectively promulgated hundreds of pieces of new legislation. With a host of new legislation and regulations on the books, EU environmental policies' effectiveness came to be assessed in terms of the narrow indicator of rates of policy implementation and compliance. This paper argues, however, the EU's constitutionalizing commitments to environmental goals equal to those of economic integration and growth, its articulating and embedding new principles and discourses, and its commitment to promoting the environmental agenda in the context of global negotiations provide more important criteria for assessing effectiveness.

In contrast with much of the existing literature, this paper also contends that legitimacy is not always directly related to policy effectiveness. Success or failure in one issue area is not always directly related to legitimacy in that area or in others. Progress was achieved on the environmental agenda even as the wider organization suffered the pangs of eurosclerosis during the 1970s and 1980s. Instead, organizational and policy legitimacy derives from deeply held normative commitment to environmental goals. Again, normative consensus and will embedded in the EU's legal foundations provide the strongest indicators of legitimacy.

Finally, the study will argue that although the EU's halting efforts to embrace new modes of governance have been roundly criticized as being rhetorical rather than put into practice, new modes of governance coincide more closely with our understandings of ecological rationality than the previous legislative/regulatory and scientific/technical modes of governing in that they are more holistic, integrated, participatory, cooperative, context-specific, and flexible. The new modes of governance should generate more effective environmental policies because the network-like processes are more inclusive improving policymakers' access to vernacular and context-specific information. The EU also seeks to integrate environmental objective across sectors and issue areas. However, the most important consequences of the most recent structural and process changes in governance are that the enhanced participation and deliberations will yield greater understanding and commitment to environmental norms and principles that constitute the ultimate foundation for organizational and policy effectiveness and legitimacy.

Thinking Theoretically about Effectiveness, Legitimacy, and Ecological Rationality

Effectiveness

Defining effectiveness is a persistent dilemma in thinking about these matters. Functionalists tend to define effectiveness as a polity's ability to achieve its objectives in a cost-effective, efficient way with minimum undesired side effects (Grant et al. 2000:1), but this parsimonious definition conveys only limited understanding of the effectiveness of EU environmental efforts. More recently, particularly since the end of the Cold War, EU effectiveness has also been discussed in relation to legitimacy and its conformity to democratic principles. Less frequently discussed but possibly more important to effectiveness in environmental matters, EU environmental structures, processes, and policies might also be assessed in terms of how well they correspond to ecological rationalities.

Functionalists claim that the EU and other intergovernmental and/or supranational organizations may possess superior problem-solving capacities relative to states because modern problems increasingly transcend state frontiers and are amenable to scientific/technical rather than state-based, political/ideological solutions. They predict that over time regional organizations' effectiveness will result in a gradual transfer of political and societal actors' expectations and loyalty from the state to the regional body. Thus, effective performance and socialization will constitute the bases for EU legitimacy (Jachtenfuchs and Kohler-Koch 1995:3).

However, the EU has faced divergent environmental challenges along its evolutionary path, so assessing policy effectiveness is a moving target in terms of the polity's objectives and indicators of success. During the 1970s through the mid-1980s, the primary challenges were to

place environmental protection on the agenda of the economic organization, to articulate and legalize environmental objectives and principles to a status equal to economic integration and growth goals, and to address the most essential, health-threatening environmental concerns such as water quality. From the outset, the EC, acknowledging the holistic and global nature of many environmental challenges, also committed itself to providing leadership in global environmental governance. Once those goals were achieved, culminating with the 1987 Single European Act, the organization devoted itself to promulgating hundreds of pieces of new legislation and regulations and bringing its member states' legislation in line with these obligations. After the 1992 Maastricht Treaty, the relatively less difficult environmental objectives had been achieved by legislation and regulation, and the organization was confronted with increasingly novel and complicated issues, within increasingly complex political processes, including increasing numbers of member states, many of whom assigned environmental issues relatively low priority and who lacked the administrative capacity to vigorously integrate sustainable development objectives into all policy areas.

With the host of new legal obligations on the books, EU environmental policies' effectiveness came to be assessed in terms of the narrow indicator of rates of policy implementation and compliance. This paper argues, however, the EU's constitutionalizing commitments to environmental goals equal to those of economic integration and growth, its articulating new principles and discourses, and its diligence in pushing forward the environmental agenda in the context of global negotiations are more important than rates of implementation and compliance for assessing EU environmental effectiveness. Further, a more complete transition to the more ecologically rational new modes of governance portends enhanced policy effectiveness.

As might be expected, analysts' different definitions, criteria, and indicators of effectiveness yield disagreement over whether the EU has been, is, and will be environmentally effective. Collier (1997:1) writes that "environmental policy is considered to be one of the European Union's most successful policies." It has established a treaty foundation for undertaking environmental objectives and allocated powers, comparable to economic ones, to EU institutions, including creating a directorate general for the environment. It has promulgated hundreds of pieces of legislation and regulations to undertaking comprehensive and complex environmental policies. And, along the way, it has articulated and constitutionalized innovative principles and paradigms that shape dominant global discourses and negotiations around environmental issues. In this way and via diplomatic interactions, the EU has provided leadership in global governance of the environment since the early 1970s. Eckersley (2004:80–81) goes so far as to suggest (with particular reference to the EU's embracing ecological modernization) that Europeans have made the transition "from environmental exploiter and facilitator of private environmental exploitation to public environmental trustee. . . ."

If the criteria for success is the degree to which EU efforts change member states' behavior, there is some evidence that the EU has produced a "ratcheting up" of environmental standards, particularly among member states with previously nonexistent or ineffective environmental institutions and policies (Grant et al. 2000:66). And positive policy outcomes for the environment have been noted in some specific issue areas such as water quality and restoration of the ozone layer.

On the whole, however, Grant et al.'s (2000:66–67) assessment is negative: "The overall impact of EU environment policies through the legislative route has not been a notable success." Policy implementation and enforcement have been weak, many policies have not achieved their intended outcomes, and there has been a slow and unrelenting deterioration of environmental quality. Grant and his colleagues reach these conclusions by focusing mostly on rates of delayed, incomplete, or inadequate member state implementation of EU legislation and regulations, increasing numbers of public and official complaints of breaches of EU environmental law, and infringement cases registered by the commission and heard by the European Court of Justice.

Legitimacy

“Legitimacy” is also a contested concept. Backstrand et al. (2008:38) provide this definition: “The acceptance of a particular social order, rule, norm, or institution by set of actors or by a specific community.” Legitimacy may also be discussed in terms of “appropriateness”¹ and commitment to participation and compliance (Baber and Bartlett, 2005:92). Legitimacy may potentially derive from several sources: 1) consensus surrounding a set of fundamental values, norms, and principles embedded in institutions, laws, regulations, and policies; 2) inclusive, free, fair, and transparent participation and deliberations guided by the public interest; 3) laws, regulations, and policies that effectively solve problems and meet public needs; 4) laws, regulations, and policies that coincide with the dominate public culture and discourses; and 5) laws, regulations, and policies that coincide with participants’ roles and identities. These multiple bases of legitimacy help explain why scholars disagree over whether and the extent to which organizational and policy effectiveness are related to legitimacy, how legitimacy in one sector is related to legitimacy in others, and how legitimacy in one sector affects the legitimacy of the entire organization and vice versa.

Jachtenfuchs and Kohler-Koch (1995:19–20) opine that a reciprocal relationship exists between effectiveness and legitimacy. Ineffective organizations and policies do not garner explicit or tacit public support and legitimacy, however, and organizations and policies cannot succeed without public support and legitimacy. However, Baber and Bartlett (2005) contend that a weak relationship exists between environmental policy effectiveness and legitimacy. Livanis (2010:252) suggests that implementation and compliance effectiveness in one sector may be related to implementation and compliance in others, and several analysts go further to express concern that the failure to implement and comply with EU environmental policies undermines the credibility of the entire regional organization (Grant et al. 2000).

As was noted, the EU has fluctuated with regard to effectiveness in its primary economic mission, but most concur that a “permissive consensus” persisted with regard to the EC and its environmental policies. Profound ineffectiveness or stalemate may force the organization to undertake radical reform to avoid system failure. Clearly, the economic and organizational disorder of the 1970s and early 1980s forced the organization to promulgate the 1987 Single European Act. In this instance, economic ineffectiveness resulted in positive consequences in the environmental sector as evidenced by the constitutionalization of environmental objectives in the Single European Act and the subsequent promulgation of more than two hundred pieces of environmental legislation.

Hooghe and Marks write that after the 1992 Maastricht Treaty, support for integration “essentially disappeared.” Proliferating European legislation and regulations began to reach deeper into society and affect citizens’ daily lives, creating winners and losers in ways that made EU policies salient and contestable. Politicization was only heightened by sustained debates and referenda over successive treaties and the EU constitution (Hooghe and Marks:2008:118, 123–25). By the mid-2000s, many judged overall EU legitimacy among the public at an all-time low, and the organization’s capacity to govern was increasingly called into question (Jordan and Schout 2006:ix). However, public support for the EU’s continuing pursuit of environmental objectives has remained strong over the decades.

The breadth of participation and quality of deliberations also constitute a possible source of organizational effectiveness and legitimacy. Particularly in the wake of the Cold War, although democratic government is a prerequisite for EU membership, there has been much talk about the EU’s suffering a “democratic deficit.” It is often pointed out that, although the heads of state and government who comprise the EU council are democratically elected, only the European

1. March and Olsen (2009) explain: “The logic of appropriateness is a perspective that sees human action as driven by rules of appropriate or exemplary behavior, organized into institutions. Rules are followed because they are seen as natural, rightful, expected, and legitimate. Actors seek to fulfill the obligations encapsulated in a role, an identity, a membership in a political community or group, and the ethos, practices, and expectations of its institutions.”

parliament is directly chosen by EU citizens, and the multilevel, complex body generates concerns about transparency and accountability. The transition from hierarchical, regulation-oriented governance to more horizontal, consensual structures and processes may portend positive and negative consequences for “democracy.” Some argue that bringing additional substate and nonstate actors into policymaking, administration, and compliance networks increases participation and transparency, allowing a wider array of information, opinions, and interests to be heard. Consensual and voluntary modes of governance taking precedence over more regulatory and coercive processes are compatible with notions of democracy.

Simon Hix (1998:51) opines that those arguing the new modes of governance enhance EU legitimacy and democracy fail to understand that state-centric conceptualizations democracy are not appropriate for the regional entity. A redefined concept of democracy is required that focuses on effectiveness rather than electoral competition, efficiency rather than parliamentarianism and representativeness, deliberation and consensus rather than majority rule, and transparency and other sources of accountability (e.g., judicial accountability) rather than electoral accountability. While policy effectiveness, efficiency, transparency, and accountability may well contribute to legitimacy, the importance of normative consensus and commitment and the quality of deliberations that create value and normative consensus and commitment are the most reliable foundations for legitimacy.

Ecological Rationality

A final criterion by which the changes in EU environmental governance may be but are not commonly assessed is the degree to which they coincide with ecological rationalities. Ecological problems are qualitatively different from other policy challenges due to the environment’s holism and interdependence; diversity and complexity; temporal and spatial variability (context specificity); substantive and scientific uncertainty; and adaptability and spontaneity (i.e., the potential capacity of ecosystems to rejuvenate and cope with stress without human intervention to achieve homeostasis), among other attributes. “Ecologically rational” human-natural systems possess the capacity to work within and manage these myriad attributes. Ideally, ecologically rational governance lexicographically, consistently, and effectively values the environment and structures, policies, and behaviors that protect the environment over other political, economic, legal, and social rationalities (Dryzek 1987:55). These other rationalities exist and are necessary for large contemporary organizations to survive and flourish. However, the various rationalities may be partially incompatible or in direct conflict and are not equally important at various times to the organization’s mission (Dryzek 1983 and 1987; Baber and Bartlett 2005:19).

Human beings have devised multiple mechanisms and combinations of social choice mechanisms (e.g., liberal democracy, markets, law, hierarchical administrations) that express, embed, and pursue these various rationalities. Instead of a holistic-interdependent-organic approach, these social choice mechanisms typically manifest individualistic-mechanistic methodologies that assume that complex environmental problems are best addressed by disaggregating them into component parts and then formulating and executing actions in pursuit of specific ends.

An ecologically rational system of governance draws inspiration from and accepts as its paradigm to the degree possible “the actual and potential analogical relationships and the interdependences in nature and those in the social realm” (Valadez 2001:221). Ecological systems are open, holistic, interdependent, diverse, complex, temporally and spatially variable, and potentially possess the ability to self-regulate and cope with stress such that the system can consistently and effectively support humans and other life forms over generations. Therefore, ecologically rational governance ideally will be *substantive* with regard to its environmental goals, *functional* with regard to the characteristics of the system, and *procedural* with regard to its deliberative and decision-making processes (Baber and Bartlett 2005:18). To summarize, ecologically rational governance:

1. Lexicographically privileges protection of the environment;
2. Integrates and coordinates environmental objectives and policies across multiple sectors, decisions, and actors;
3. Avoids spatial and temporal displacement of environmental risks and harm;
4. Is flexible, robust, and resilient (i.e., puts in place norms, principles, policies, processes, and structures responsive to substantive, spatial, and temporal diversity, complexity, and change);
5. Enables and institutionalizes meaningful participation by all relevant political, economic, and social actors;
6. Is open to changing and novel scientific and vernacular understandings, particularly with regard to negative policy feedback; and
7. Fosters organizational and social learning (Dryzek 1987).

While EU leaders exhibit a commitment to liberal democracy and unfettered markets, and have embraced discourses associated with sustainable development and ecological modernization, OMC, and “new modes of governance,” most structures, processes, and policies remain hierarchical and administrative in nature. Hierarchical, administered systems are not compatible with ecological rationalities for several reasons. While hierarchical models of governance may allow political elites and administrators to set environmental objectives for the entire system and ostensibly gain control over the system and environmental resources, these models assume that leaders understand and can respond to the holism, interdependence, complexity, uncertainty, and variability of environmental problems. Bureaucracies’ most common response to the environmental problems, however, is to disaggregate the problem into component parts. There is little guarantee that the various subunits will act adequately in concert to address the holistic and complex nature of environmental problems. Academic research into bureaucracies actually finds limited compliance with leadership objectives at lower levels of the hierarchy (Cyert and March 1963). Lower levels of administrative systems have a different, often superior, understanding of policy problems than leadership and greater sensitivity to negative feedback. Hierarchical administrative systems have flawed feedback systems; they lack sensitivity to external signals. Openness to negative feedback requires a willingness to accept unanticipated consequences and admit errors in previous decisions. Error is probable in complex human-natural systems. However, administrators are rarely willing to admit their theories, models, and policies are fallacious or inadequate. Their personal reputations and fortunes as well as those of their administrative units are tied to their policy choices being interpreted as successful. Since failure is not an acceptable assessment, administrative systems have a tendency to conceal and perpetuate errors, denying themselves effective organizational learning (Dryzek 1987:91–101).

Because environmental problems are complex, uncertain, and changing, no static body of scientific theory or information is adequate to address policy problems. Dryzek (1987:104–05) explains that

While hierarchy *may* be adequate for the coordination of routine tasks . . . , it is a bad problem-solving device. . . . [In] a world threatened by severe ecological problems—hierarchy is a bad principle for the organization of society. An effective problem-solving community, the archetype of which is the scientific community, is a community of equals in which good arguments prevail, not the authority of individuals.

Dryzek (1987:109) concludes that “the prospects for ecologically rational centralized, administered forms of social choice are bleak indeed.”

The evolution of EU environmental governance is the story of the polity’s gradually increasing rhetorical and legal commitment to establishing environmental protection as co-equal with economic growth and development and integrating environmental objectives across all policy areas. Particularly in putting into place principles like subsidiarity, creating business and civil society partnerships and network forms of governance at the agenda setting, policy-making, and policy-monitoring stages, and committing itself to context-specific modes of

governance, it has sought to increase flexibility, robustness, and resilience. Network governance also has increased and institutionalized opportunities for multiple political, economic, and social actors to participate in more context-specific environmental governance. The commitment to new modes of governance that emerged in the 1990s relies for success on enhancing access to information, volunteerism, and social learning.

Most scholars agree EU environmental effectiveness and legitimacy increased and was sustained respectively until the early 1990s but many contend that these attributes since have suffered relatively steady decline. Most aspects of the hierarchical, administrative, scientific/technical structures and processes of EU efforts do not conform to our understandings of ecological rationality. This study, however, contends the EU faced various environmental challenges at different stages of its evolution, and the case may be made that it effectively addressed these challenges. The degree to which the EU may be assessed as environmentally effective depends upon the indicator being used.

This study goes further to assert that there are also multiple bases (and indicators) on which the legitimacy of EU environmental efforts may be assessed. While many contend that policy effectiveness and legitimacy are reciprocally causative, in my view, normative consensus, commitment, and legalization are the strongest bases (and indicators) for legitimacy. Employing these indicators, the legitimacy of EU environmental efforts has remained strong over the past four decades. Finally, while some aspects of EU environmental governance conform to our understanding of ecologically rational governance, obviously much needs to be done in this area. However, the principles, discourses, and partially adopted new modes of governance of the past two decades exhibit greater ecological rationality than other rationalities embedded in the organization's treaties, legislation, and discourses. There is a strong case to be made that the way forward is to complete the transition from hierarchical approaches of the "old government" to the "new modes of governance."

Phase I—Addressing Environmental Issues without a Treaty Basis in an Era of “Permissive Consensus”

As was noted, the 1957 Treaties of Rome did not reference the environment. Therefore, the European community's initial environmental challenges were to bring these issues to the EC agenda, to address the most immediate environmental threats to human health, and to build institutional capacity to address environmental issues. From the outset, West Europeans also provided global leadership in creating global environmental governance. During the 1960s, the European economic communities promulgated several environmental directives congruent with its single market objectives. Directive 67/548/EEC on classification, packaging, and labeling of dangerous substances, agreed to in 1967, is usually identified as the first EEC environmental legislation. In 1971, an environment and consumer protection unit was established within the commission; that same year the commission presented a first detailed report on the environment to the European Council. In 1972, that unit became the Environment and Consumer Protection Service, with a staff of fifteen, attached to the Industrial Policy Directorate (then DGIII; Grant et al. 2000:9–10).²

Western Europe, birthplace of the industrial revolution, is densely populated and had achieved significant economic growth after the devastation of World War II. These factors exacted an environmental toll, and by the 1960s, environmental consciousness emerged on the grassroots in the member states. During June 1972, the UN sponsored a conference on the Human Environment in Stockholm, which served as an important consciousness-raising event and marked the beginning of the global environmental movement and global environmental governance. At the October 1972 Paris Summit, the European Council confirmed that "economic expansion is not an end in itself," laid down a series of environmental principles,

2. In 1981, a reorganization of the commission upon Greece's accession transferred environmental policy responsibilities from DGIII to an environment directorate, DGXI (Grant et al. 2000:10).

and agreed to adopt an EC environmental policy (EC Committee of the American Chamber of Commerce 1994:v). Since 1973, the EC has enacted six multi-year Environmental Action Programs (EAPs) establishing general principles and priorities and outlining measures to be undertaken in various policy areas. These programs demonstrate the member states' growing commitment to coordinate and harmonize environmental regulations to level the economic playing field and to protect and improve the environment.

The first Environmental Action Program (1973–77) established several principles that continue to serve as bases for EU policy today: the polluter pays,³ preventive measures are preferable to remediation, harmonization of environmental policies is to be undertaken to ensure that divergent state policies do not become barriers to the common market, environmental protection is compatible with economic and social development, and environmental objectives should be taken into consideration in all socioeconomic decisions. In practice, however, during the first EAP the EC devoted most of its resources to environmental remediation rather than protection (Commission 1973). The second EAP (1977–81) endorsed the same principles and stressed the importance of environmental impact assessments for EU activities (Commission 1977). Environmental protection rather than remediation received stronger emphasis in the third EAP (1982–86). A change in focus encouraging environmental management as the basis for economic and social development was discernible. Environmental goals were no longer to be regarded as subordinate to common market ones, and were to be integrated into other policy areas such as agriculture, energy, industry, and transportation (Commission 1982; Caldwell 1990:138–42). Pre-1987 environmental legislation was justified primarily on the grounds that divergent environmental regulations in the member states distorted trade competition and constituted a nontariff barrier to free trade. While the aspirations and emphases expressed in the EAPs provide evidence of increasing commitment to prioritizing environmental objectives relative to economic ones and to integrating environmental concerns into other policy areas, without a treaty basis, environmental problems were addressed in a relatively ad hoc and fragmented way.

While the academic community debated whether intergovernmental or functionalist/supranational models best characterized the European communities, during this period, most EC policies were subject to member states' vetoes, and without a treaty basis, environmental matters required unanimous member state approval.⁴ Between 1972 and 1986, in addition to the three EAPs, the EC enacted more than one hundred measures (approximately 20 percent of which were important) to affect and coordinate environmental protection (Koppen 1988). Likely in reaction to the lack of treaty basis and the EAP and the directive format of many environmental decisions, Rehinder and Steward (1985:33) describe the pre-Single European Act EAPs and other environmental legislation as "soft law [which] consists of programs and declarations of a non-binding nature," representing "a new type of policy developed through political consensus of the member states." However, reflecting the member states' domestic orientations toward environmental policy, the EC approached environmental problems in an interventionist, legalistic, regulatory, and scientific/technocratic way, generally leaving implementation to the member states.

While the European communities' economic agenda suffered markedly during the economic downturn of the 1970s and 1980s (i.e., global "stagflation" resulted in "Eurosclerosis"),⁵ its embracing of environmental objectives was congruent with the public's and member states' growing commitment to environmental objectives. Further, between 1981 and 1985, the European Court of Justice (ECJ) rendered a series of judgments that progressively upheld the validity and legitimacy of the communities' environmental policies (Koppen 1988). Thus, while

3. That is to say, the polluter bears the cost of avoiding environmental damage to specified (usually technological) limits and after that the cost of remediating residual pollution.

4. After January 1966, qualified majority voting was limited by the "Luxembourg Compromise" whereby France successfully reserved the right of any member state to veto a proposal in the council by declaring that a "vital" or "very important" interest was at stake.

5. During this period, even Ernst Haas (1975) despaired of the European project and declared regional integration theory obsolete.

Euroskeptics maintained an ongoing side conversation, the polity's environmental focus and legitimacy were not seriously called into question. With regard to EU governance in general, Risse-Kappen (1996:74) affirms that between the 1960s and the early 1990s before controversies erupted over the implementation of the Single European Act and the negotiation of the 1992 Maastricht Treaty, a "permissive consensus" was obtained, suggesting the organization's legitimacy was not linked directly to contemporary economic effectiveness. While economic integration in the EC had been an elite-driven project, the polity's increasing environmental emphasis may have contributed in some small measure to this permissive consensus and the polity's legitimacy in the eyes of the public.

The economic turbulence of the 1970s undermined the Keynesian consensus in Europe and in the U.S. and brought to power Margaret Thatcher in Britain in 1979 and Ronald Reagan in the U.S. in 1981, ushering in the era of neoliberalism. Scholars began discussing the downsizing of the state and the introduction of market and market-like policy instruments in terms of "the hollowing out of the state" and the advent of a "new governance" at the state level (Rhodes 1986 and 1994). "Liberalization," "return to the market," and "deregulation" became the new catchphrases (Holzinger et al. 2006:407). In the third EAP (1982–86), the commission began advocating use of "economic incentive instruments," and in the fourth EPA (1987–92), instruments such as emissions taxes, state subsidies, deposit permits, voluntary agreements with polluters, and liability laws were dealt with in some detail.

The attractiveness of these instruments to the commission (and ecological economists) derived from the following understandings:

1. Market and market-like policy instruments correspond well to the "polluter-pays principle,"
2. Economic instruments guarantee the optimal allocation of environmental resources in that they are more *flexible* than regulatory instruments and they encourage firms to invest in environmental protection where costs are lowest. The assumption is that if preventive measures cost less than regulatory requirements, then firms will choose the former.
3. If pollution taxes must be paid and/or permits purchased and the firm is still liable for cleaning up residual pollution, firms are encouraged to develop more *comprehensive* and innovative mechanisms to avoid pollution (my emphasis; Holzinger et al. 2006:405).

During the mid- and late-1980s, commission interlocutors found these economic arguments particularly appealing. Against the background of worsening global economic conditions, the commission sought to preserve the commitment to environmental objectives by stressing that environmental protection could be carried out in a cost-effective manner, and that, with farsighted planning, a focus on the environment could actually contribute to solving economic problems. This having been said, only 2.9% of policy instruments outlined in the fourth EAP were market oriented, compared to 82.5% of instruments that were interventionist in nature, and 14.7% that could be labeled "new or context-oriented governance" (Holzinger et al. 2006:406, 413). While progress was made toward creating ecologically rational governance,⁶ in practice, many of these commitments remained legal and rhetorical and EC processes and policies remained predominantly hierarchical, administrative, interventionist, and regulatory in nature.

The Single European Act provides a Treaty Basis for Environmental Governance

The 1987 Single European Act (SEA) represented the constitutionalization of EC environmental policy in that it amended the Treaties of Rome to require that environmental protection be incor-

6. Important principles such as the polluter pays were institutionalized into EU policies; protecting the environment was identified as the basis of economic and social development; environmental protection was to be integrated into other policy areas; the ECJ demonstrated a willingness to uphold environmental objectives; and environmental impact assessments became part of the polity's standard operating procedures.

porated into every aspect of community policy. The SEA also altered the polity's institutional capacities and decision-making procedures. In 1985, Urwin (1985:231) wrote that the SEA "had the potential for revolution, suggesting a shift in the existing balance of power away from the member states towards the community institutions." Qualified majority voting replaced the unanimity requirement in the council on matters relating to the single market, and the "cooperation procedure" was institutionalized whereby commission proposals were sent to the European Parliament (EP) for a "second reading," affording the parliament greater participation and power in policymaking. With this procedure, the EP could amend proposed legislation unless overridden by unanimous opposition in the council. The EP is regarded as the "most green" among EC bodies, and this change contributed to the promulgation of more environmental legislation. The SEA also increased the power of the commission relative to the council. If the commission supported amendments offered by the parliament in the second reading, pressure was increased on the council to accept the amendments, which could only be altered by a unanimous vote. The cooperation procedure made policy more transparent, more sensitive to public opinion since the parliament is an elected body, and more unpredictable (Haigh and Baldock 1989:12).

Consensus obtained within the EC regarding the desirability of providing a more solid legal foundation for the organization's extensive environmental legislation. The British and other member states challenged the legal competency of the EC to promulgate specific environmental directives, but they never sought vindication of their position in the European Court of Justice. Over time, even the Danes and Germans voiced support for more formal authority for the EC to take on environmental tasks. For example, although the Danes had reluctantly agreed in 1979 to a directive protecting wild birds, they argued that the EC lacked legal competence to legislate in areas such as protecting wildlife habitats and, it was generally understood that no further wildlife legislation should be adopted unless it was directly related to trade. Thus, member states, for differing reasons, agreed that environmental initiatives of the organization required clearer legal foundations. The single market, however, rather than the environment, was the primary focus of this legislation. Andrew Moravcsik (1991) contends that the commission was responsible for quietly slipping environmental provisions into the revised treaty without encountering opposition from members' representatives.

The 1980s also brought a change in EC understandings associated with this policy area from predominantly economic/scientific/technocratic ones to include the "sustainable development" discourse. In 1987, the United Nations-initiated World Commission on Environment and Development (the Brundtland Commission) published its report, *Our Common Future*, and ideas associated with sustainable development gradually infiltrated the economic-growth-oriented EC discourse.⁷ The 1993–2000 fifth EAP was titled Towards Sustainability (Commission 1998; Ward and Williams 1997:456–59; Gottweis 1999:65). Thus, simultaneous with the EC's embracing of a more market-oriented discourse of environmental governance, the alternative discourse of sustainable development entered the lexicon.⁸ Sustainable development would ultimately become the predominate discourse in global environmental and development governance.

The SEA opened the door to profound changes in EU policymaking processes and instruments. In 1990 alone, the EC adopted two hundred pieces of binding environmental legislation (Lenschow 1999:46). For the first time, Brussels became an important site for decision making regarding environmental matters, which meant that environmental and corporate lobbyists were required to extend their activities beyond member state capitals to include EC bodies. And even as this transfer of power to Brussels was occurring, the SEA also introduced the

7. See Dryzek (2005:143–180) for explications of the discourses of sustainable development and ecological modernization.

8. The *Brundtland Report* (1987:8, 46) explains that "Humanity has the ability to make development sustainable—to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs." Later, it continued that "In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations."

apparently contradictory concept of *subsidiarity* relative to environmental matters. This principle required that

In areas which do not fall within its exclusive competence, the community shall take action . . . only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the member states and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the community (Article 5, formerly Article 3b, of the TEC, Commission 1992).

The subsidiarity principle may be interpreted as contributing to ecological democracy by its potentially increasing the number of participants in environmental decision making, bringing in additional and alternative sources of knowledge, making environmental policy more context specific, and increasing opportunities for deliberation and normative and policy consensus building, however, it also introduced more ambiguity and uncertainty in policymaking and implementation.

The legal and procedural changes wrought by the SEA and the subsequent rash of new environmental legislation and regulations exacerbated ongoing implementation and compliance problems and concerns that environmental challenges were going unmet. Policymakers interpreted these problems as signaling a need for greater policy integration and expanded participation via partnerships and networks. The fifth EAP (1992–2000) emphasized policy integration, and the commission reiterated this goal in its 1993 communication on *Integrating by the Commission of the Environment into other Policies* and the 1994 *White Paper on Growth, Competitiveness, and Employment*. Seeking to create horizontal connections between and among various sectors and to increase vertical interaction with societal actors, the commission created three categories of dialogue groups:

1. a consultative forum to serve as a sounding board for EU environmental policymaking in relation to its economic agenda;⁹
2. an implementation network comprised of member states' officials; and
3. a policy review group composed of member states and DG Environment officials.

The commission expressed its intent to clarify the mechanisms for internal consultation, to prepare an annual integration report, and to require self-evaluation of integration efforts by the various DGs. A number of additional transparency measures were announced, including earlier publication of its annual work plan and the delineation of a code of conduct on access to information supported by technological innovations (Lenschow:1999:46).

DGXI's efforts to move from a legalistic/regulatory/top-down approach to a more inclusive, participatory one was to be achieved by creating networks; Ward and Williams (1997:439) confirm that "networking provides the non-tangible infrastructure for this process." They identify the 1990 *Green Paper on the Urban Environment* as the first sustained discussion and effort by DGXI to include subnational governments (SNGs, i.e., cities, regions, etc.) in policy-making processes. Prior to the 1990s, interactions between DGXI and SNGs had been limited and sporadic. The commission turned to networks to address a variety of capacity, democratic deficit, implementation and compliance, and legitimacy concerns. Increasing SNGs', interest groups', and experts' input into environmental policy was seen as a way to improve the practicality of policies and to enhance implementation and compliance. SNGs' participation in networks was envisioned as a means to increase awareness and understanding of the EU across the various levels of government, and, thus, enhance legitimacy. Transnational networks also represented a mechanism whereby the commission could gain access to representative European expertise and opinion while simultaneously coordinating

9. Forum membership included four representatives from regional and local authorities, five representatives from consumer and environmental groups, two representatives from trade unions, nine industrial representatives, two representatives from agricultural and agri-food organizations, and nine independent personalities (Lenschow 1999:46). Between 1998 and 2010, the EU created thirty-seven social dialogue committees who generated more than three hundred documents such as guidelines and codes of conduct (Pop 2010).

and controlling interactions with lobbyists, avoiding lobbying overload. Networks were also regarded as a way to improve policy efficiency.

With regard to urban environmental matters, one official estimated that a predominantly regulatory approach required ten to twelve years to yield results, whereas encouraging networks of cities to become partners and stakeholders in designing their own policy solutions could achieve results in four to five years (Ward and Williams 1997:439). Networks were seen as an inexpensive, flexible, and efficient way to create and implement policies. Further, once operational, multi-issue networks exhibited a tendency to “breed” additional specialized networks. For example, Eurocities and the International Council for Local Environmental Initiatives fostered creation of European Cities for Climate Change and Eurocities Environment (Ward and Williams 1997:452–53).

The 1992 Maastricht Treaty (the Treaty on European Union) strengthened the power of the European Parliament through creation of the co-decision procedure, which gave the EP greater legislative power in a number of policy areas. In line with the concept of subsidiarity, a Committee of the Regions and Local Authorities was created to formalize the growing importance of subnational entities (Ward and Williams 1997:439–48). An additional change that occurred during this period, particularly to address highly technical issues, was the creation of several quasi-autonomous agencies including the European Environment Agency and the European Food Safety Authority which became operational in 1990 and 1994 respectively.

The net consequences of these profound legal and procedural changes were mixed. While the legal authority to address many environmental problems moved from the member states to Brussels resulting in some loss of member state control over local authorities regarding environmental matters, it is difficult to distinguish between the consequences of European integration and pressures in member states toward centralization and decentralization. The thrust of the network concept was to change the roles of SNGs from implementers of hierarchically mandated policy into innovators, leaders, partners, and facilitators. Throughout the 1990s, however, SNGs’ abilities to participate effectively in network governance were limited due to the lack of resources, lack of knowledge of participatory opportunities on the regional level, and a lack of political will.

Many questions were left unanswered as to how these networks would work, including: How would the networks be structured and managed? How would the new governance be connected to the old forms of governance, i.e., legislation and regulations? How could their effectiveness and legitimacy be guaranteed? The commission had significant experience working with networks in relation to lobbying and policy-making activities, but it was less clear how networks could be used to govern, implement policies, and achieve compliance. Many policymakers realized that new coordination capacities would have to be created and managed to address the increasingly interconnected policy processes, but few had the time or political incentives to identify and create bureaucratic procedures, provide staff training, or manage the networks (Jordan and Schout 2006:xi–xiii). However, by the end of the decade, the responses of environmental networks were changing from reactive efforts to improve access to funding and to enhance their economic performance via lobbying to proactive partnership in policymaking. Ward and Williams (1997:460) expressed optimism that SNGs-commission networks also were becoming more formal and stable, and “a process of incorporation . . . [was] occurring.”

The case may be made that the changes in governance wrought during this period represented progress toward creating ecologically rational governance in that many more participants were brought into the decision making, implementation, and evaluation stages of environmental policymaking. Access to both context-specific and scientific/technical expertise was enhanced through the introduction of new participants including semi-autonomous specialized agencies. The introduction of network governance also portended benefits in terms of flexibility, efficiency, and legitimacy derived from expanded participation, understanding and consensus building, and policy commitment.

“New Modes of Governance”

Over the past fifteen years, the EU has sought to achieve its objectives of sustainable development, and environmental policy integration via new modes of governance, particularly the “open method of coordination” (OMC) with regard to policymaking and the Cardiff process which aims to incorporate environmental objectives into other policy areas.¹⁰ The OMC and the Cardiff process involves creating networks of regional, state, and subnational partners, both public and private, within and across sectors to engage in environmental target-setting and benchmarking, performance reporting, identifying “best practices” via peer review, and “naming, faming, and shaming.” The multiple actors involved are encouraged to develop a sense of ownership of environmental problems. The EU hopes that the new modes of governance will encourage the multiple sectors to “design out” potential negative environmental externalities from policies at early stages of the policy process (Jordan and Schout 2006:x), and that the heightened level of participation would improve the effectiveness and legitimacy of environmental policies.

The 2001 White Paper on governance generally described rather than clearly defined approximately six new modes of governance; they were mostly explained in terms of what they were not—the legislative and regulatory approaches of the “old governance” (Commission, 2001; Jordan and Schout 2006:6). The new practices were designed to encourage voluntary policy convergence and policy learning rather than relying exclusively on legislation, regulations, and sanctions to achieve implementation and compliance. However, in the end, the commission presented the new modes of governance as complementing rather than replacing old modes of legislating and regulating.

Achieving sustainable development and integrating environmental objectives into all policy areas via new modes of governance are ambitious, ambiguous, and highly transformative aspirations. The commission remains committed to using market-based mechanisms, regarding them as a flexible and efficient means to achieving its environmental objectives (Commission, 2004; Jordan and Schout 2006:9, 19). No member state can be said to have completely made the transition to new modes of governance, and the European parliament has generally failed to join the networks. In 2001, Peters and Wright (157) wrote that “coordinating in a multilevel, multi-actor (they might have added multi-sectoral) system such as the EU, extends the ‘policy chain’ almost to the breaking point.” In 2003, the European Environment Agency (277) wrote with regard to the Cardiff process, “the process . . . lacked urgency and has yet to have a significant impact on sectoral policy making, let alone on improvements on the ground.” And, the following year, the commission conceded that “the [Cardiff] process has failed to deliver fully on expectations.” With regard to governance approaches in general, Moravcsik (2005:366) opined that “there is little evidence that [they] . . . matter . . . for policy outcomes.”

In 2004 and 2007, twelve new East European states joined the European Union introducing formidable challenges to the achievement of regional environmental objectives and to the effectiveness and legitimacy of governance. Environmental problems of increasing scale, complexity, and scientific uncertainty proliferated.¹¹ EU governance, in general, has become more deeply and widely involved in European citizens’ lives resulting in increased politicization and a concurrent perception of decreased effectiveness and legitimacy in all policy areas (Jordan and Schout 2006:20). By the mid-2000s, environmental policy integration via the new modes of governance came to a standstill. The Cardiff process never really got off the ground. Sufficiently stable and effective cross-sectoral networks had failed to materialize despite a rhetorical commitment to the goals and procedures. The EU is arguably more deeply vertically divided by sectors than most member governments; sectoral interests are strong and

10. The Cardiff process was articulated in 1998 and the OMC codified in 2000.

11. Two salient examples: the “Mad Cow Crisis,” which began in Britain in 1986 and persisted for more than a decade, was compared to the 1965–66 “Empty Chair Crisis” in its undermining of confidence in European integration, and member states often blatantly refused to comply with EU decisions regarding genetically modified organisms.

highly divergent, and turf battles among them commonplace. In the mid-2000s, more than sixty multiyear sectoral plans were underway; harmonizing them to integrate environmental objectives represented a formidable challenge. A profound disconnect was apparent between environmental policy needs and the EU institutional capacity to respond (Jordan and Schout 2006:9, 13).

Critics charge that the commission remains overly wed to the status quo, and committed to a narrow interpretation of governance—reducing the quantity and detail of regulations (i.e., improving regulation) and creating more independent agencies (Scott 2002:61). The commission is seen as working diligently to manage policy areas where there are a clear legal mandate and political support from the member states. However, when policy problems are intractable and horizontal and vertical cooperation more difficult to achieve, its commitment to the new modes of governance is less evident (Jordan and Schout 2006:34, 37). Usually new governance instruments combine with and complement rather than replace legislation and regulations (Jordan et al. 2005).

During this governance stage, many analysts, employing as indicators rates of member state implementation and compliance (see fn 3), label EU environmental efforts as ineffective. Livanis (2010:88, 92), whose dataset includes the years 1998–2007, identifies 2002 as having the lowest implementation rate of approximately 92 percent. He concludes that this level of “non-compliance amounts to a crisis.” What constitutes a “crisis,” however, is contestable—these data may be interpreted from a “half-full” or “half-empty” perspective.

Additional indicators employed to argue ineffectiveness are the annual numbers of complaints and alleged breaches of EU law deriving from the public, Parliamentary questions or petitions, and cases identified by the commission; and the number of environmental infringements cases brought before the ECJ. Livanis (2010:84) informs that between 1998–2007, 25 percent of all infringement proceedings brought before the ECJ were related to the environment compared to 21 percent that pertained to the single market. The usefulness of these indicators to assessing and comparing effectiveness is debatable. Over the years, the quantity and types of environmental obligations have proliferated and changed and EU citizens, NGOs, and EU bodies have increased knowledge of and procedures whereby complaints might be lodged. With stronger principles, norms, and legal embeddedness of environmental goals, the EU and its citizens have a greater commitment to and expectations with regard to environmental protection. Increasing numbers of complaints and infringements proceedings may indicate increased effectiveness and legitimacy of EU environmental governance. More environmental problems are being addressed by EU governance and EU citizens and bodies participate more actively in insuring implementation and compliance.

Our understandings of ecological rationality suggest also that more optimism is warranted with regard to the new modes of governance. Many aspects of the new modes of governance exhibit several attributes essential to effective environmental management. Ecologically rational systems lexicographically prioritize and coordinate environmental objectives across actors and decisions, act out of a holistic and interdependent worldview, and enable meaningful participation by all affected parties. Policy feedback loops are many and the organization is culturally and structurally open to learning. Rather than assuming that administrators and regulators understand the environmental problems and should be the sources of policy solutions, lower levels of governance are acknowledged as being more sensitive to negative feedback and likely having a superior understanding of context-specific policy problems. The new modes of governance incorporate input from multiple levels of governance including having private and subnational actors participate in policy deliberations, decision making, and implementation. These subnational and private actors are involved in setting environmental goals and benchmarks, identifying “best practices,” relying on policy learning rather than regulations, and sanctions to achieve behavioral change. There is an overt attempt to integrate environmental objectives within and across the various policy sectors, as exemplified by the

EU's recent efforts to link objectives regarding climate change with energy and economic development aid policies. The new modes of governance, including relying on market-based instruments, more closely reflect ecological rationalities than more top-down, interventionist policy approaches. A complex polity like the EU will not achieve a complete transformation to ecologically rational governance overnight. In the long term, the new modes of governance portend significant benefits for addressing the EU's increasingly complex and intractable environmental challenges.

Conclusion

The EU has evolved from undertaking intergovernmental, ad hoc, and legislative and regulatory responses to regional and global environmental problems to embedding environmental objectives into EU treaties and legislation, making them legally equal in importance to its single market objectives. Principles and discourses like the precautionary principle, sustainable development, and subsidiarity have been articulated, constitutionalized, and exported globally. The EU has increased its institutional capacity to pursue environmental objectives, requires that environmental objectives be integrated into every aspect of EU policies, and provides leadership in global environmental governance.

After the legal zenith of promulgating the 1987 SEA and the 1992 Maastricht Treaty, hundreds of directives and regulations, and acknowledging the increased challenges of implementation and compliance, the EU embraced the concept of subsidiarity and via multilevel governance sought to create quasi-corporatist partnerships with relevant societal actors. In the 1990s, it then moved toward network governance, which includes bringing additional subnational government, private actors, and experts into the policy process, and employing OMC and the Cardiff process. While the EU now has sufficient legal authorization to address environmental problems, its objectives are more daunting (sustainable development and integration of environmental objective with economic and social ones) and the environmental problems are more challenging in terms of their scale, complexity, novelty, and scientific uncertainty. (Consider climate change and biotechnologies in terms of these attributes.) By the early 2000s, "old governance" approaches to managing the environment were increasingly called into question.

The twenty-seven member states have vastly different attitudes toward environmental concerns and institutional capacities and interests in undertaking regional objectives. Since the late 1980s and early 1990s, the discourse, particularly within the commission, promoted reliance on market mechanisms and voluntary and negotiated targets, self-monitoring and reporting, and "naming, faming, and shaming" rather than legislation, regulations, and sanctions.

Assigning greater importance to the creation and legalization of norms and discourses associated with environmental protection, creating institutional capacity to address the environment, providing leadership in environmental leadership rather than increasingly numbers of member states' failure to promptly transpose EU legislative into national law or number of complaints and infringement cases, this paper contends the EU has actually increased its effectiveness over time. Further, as the polity makes progress toward more fully embracing the new modes of governance, effectiveness should improve given the new modes of governance are more ecologically rational.

We have further contended that policy legitimacy is not directly causally related to policy performance as claimed by many but rather based on value and normative consensus. Many analysts insist the EU's current reliance on a combination of the old and new modes of governance is not sufficient to achieve its environmental goals, which has negative consequences for the polity's legitimacy. They point out that as EU policies reach deeper into national societies (beginning with the SEA and Maastricht) and more people are directly affected by its policies, public skepticism builds upon itself. Factors such the referenda associated with treaty change, food crises, heightened concerns about immigration, and the current economic downturn only exacerbate the legitimacy problem. I contend, however, that the EU's steady progress toward

creating and legalizing new norms and principles (the precautionary principle, sustainable development, subsidiarity) provides more persuasive evidence that environmental protection is viewed as legitimate by political leaders and the general public. Even in the midst of global economic downturn, citizens still regard EU prioritization of the environment as appropriate.

Many contend that in multicultural polities, processes of democratic participation are the primary sources of organizational and policy legitimacy. They submit that as more stakeholders are brought into the agenda setting, decision making, and implementation processes, legitimacy will be enhanced because participation will yield higher quality, context-specific policy, enhance parties' commitment to the organization and policy, and increase the likelihood they will facilitate implementation resulting in more effective policy outcomes. All of this is persuasive. However, ecological democracy also creates and legalizes norms, principles, and discourses that are the ultimate foundations for organizational and policy legitimacy.

EU officials cannot reduce the size of the organization or change the scale and complexity of modern environmental challenges. They can, however, improve its capacity to govern on the regional, national, and subnational levels and address perceived legitimacy concerns. Most agree that internal reforms are needed in the European Commission to create sufficient internal and external management capabilities to coordinate or "steer" the networks across levels of governance and sectors. The relatively newly created networks should be formalized and strengthened among DG Environment, the European Environment Agency, the member states' environmental and sectoral ministries, and the relevant subnational and private economic and social stakeholders. The commission's ability to coordinate these networks must be honed to improve the gathering and exchange of information, identify and explicate the consequences of potential policy options, foster consensus and agreement, monitor environmental trends and policy outcomes, audit the networks' and individual partners' capabilities, and monitor implementation and compliance (Jordan and Schout 2006:20–25, 40). While the current diagnosis of the quality of governance is generally pessimistic, insufficient time has elapsed to bring about an entire change of culture and governance implied by the new modes of governance and to create the institutional capacity to manage the network governance. Embracing participatory processes that integrate environmental objectives in all sectors and involve quasi-self regulation and learning are compatible with our understanding of "ecologically rational" governance. Given the current state of the EU, the global economy, and the environmental challenges, the way forward is to more fully make the transition to the new modes of governance.

REFERENCES

- Baber, W.F. and R.V. Bartlett (2005) *Deliberative Environmental Politics, Democracy and Ecological Rationality*, Cambridge: MIT Press.
- Backstrand, K., J. Khan, A. Kronsell, and E. Lovrand, eds. (2008) *Environmental Politics and Deliberative Democracy, Examining the Promise of New Modes of Governance*. Cheltenham: Edward Elgar.
- Caldwell, L.K. (1990) *International Environmental Policy, Emergence and Dimension*. Durham: Duke University Press.
- Collier, U. (1997) "Sustainability, subsidiarity and deregulation," *Environmental Politics*, 6(7):1–23.
- Commission of the European Communities (Commission) (1973) "First Programme of Action on the Environment" *Official Journal of the European Communities* 16, C112, 20 December.
- Commission of the European Communities (1977) "Second Programme of Action on the Environment (1977–1981)," *Official Journal of the European Communities* 20, C134, 13 June.
- Commission of the European Communities (1982) "Third Programme of Action on the Environment (1982–86)," *Official Journal of the European Communities* 26, C46, 2 December.
- Commission of the European Communities (1990) *Green Paper on the Urban Environment: Communication from the Commission to the Council and the Parliament*, COM(90) 218 final, 27 June.
- Commission of the European Communities (1992) "The principle of subsidiarity," SEC(92)1990 final,

27 October.

- Commission of the European Communities (1993) *Growth, Competitiveness, Employment: The Challenges and Ways Forward into the 21st Century—White Paper*, COM(93)700, December.
- Commission of the European Communities (1993) *Integration by the Commission of the Environment into other Policies*, SEC (93) 785/5, 28 May.
- Commission of the European Communities (1998) “Towards Sustainability: A European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development,” *Official Journal of the European Communities* L 275, 10 October.
- Commission of the European Communities (2001) *European Governance: A White Paper*, COM (2001) 428, final, 25 July.
- Commission of the European Communities (2004) *Integrating Environmental Considerations into Other Policy Area: A Stocktaking of the Cardiff Process*, COM (2004) 394 final, 1 June.
- Cyert, R. and J.G. March (1963) *A Behavioral Theory of the Firm*. Englewood Cliffs: Prentice-Hall.
- Dryzek, J.S. (1983) “Ecological rationality,” *International Journal of Environmental Studies* 21:5–10.
- Dryzek, J.S. (1987) *Rational Ecology, Environment and Political Economy*, Oxford: Basil Blackwell Inc.
- Dryzek, J.S. (2005) *The Politics of the Earth, Environmental Discourses*, Oxford: Oxford University Press.
- Eckersley, R. (2004) *The Green State*, Cambridge: MIT Press.
- EC Committee of the American Chamber of Commerce in Belgium (1994) *EU Environment Guide*, Brussels: EC Committee of the American Chamber of Commerce in Belgium.
- European Environment Agency (2003) *Europe’s Environment: The Third Assessment*, Copenhagen: European Environment Agency.
- Gottweis, H. (1999) “Regulating Genetic Engineering in the European Union,” in B. Kohler-Koch and R. Eising, eds., *Transformation of Governance in the European Union*, London: Routledge.
- Grant, W., D. Matthews, and P. Newell (2000) *The Effectiveness of European Union Environmental Policy*, Houndmills: Macmillan Press Ltd.
- Haas, E.B. (1975) *The Obsolescence of Regional Integration Theory*, Institute of International Studies, University of California, Research Series No. 25.
- Haigh, N. and D. Baldock (1989) *Environmental Policy and 1992*, London: Institute for European Environmental Policy.
- Hix, S. (1998) “The Study of the European Union II: the ‘New Governance’ agenda and its rival,” *Journal of European Public Policy* 5(1):38–65.
- Holzinger, K., C. Knill, and A. Schafer (2006) “Rhetoric or reality? ‘New Governance’ in EU environmental policy,” *European Law Journal* 12(3):403–420.
- Hooghe, L. and G. Marks (2001) *Multi-Level Governance and European Integration*. Lanham, MD: Rowman & Littlefield Publishers, Inc.
- Hooghe, L. and G. Marks (2008) “European Union?” *West European Politics* 31(1–2):108–129.
- Jachtenfuchs, M. and B. Kohler-Koch (1995) “The transformation of governance in the European Union,” in M. Jachtenfuchs and B. Kohler-Koch (eds.) *Europäische Integration*, Opladen: Leske & Budrich.
- Jordan, A., R.K.W. Wurzel, and A. Zito (2005) “The rise of ‘new’ policy instruments in comparative perspective,” *Political Studies* 53:477–796.
- Jordan, A. and A. Schout (2006) *The Coordination of the European Union, Exploring the Capacities of Networked Governance*, Oxford: Oxford University Press.
- Koppen, I.J. (1988) *The European Community’s Environmental Policy, From the Summit in Paris, 1972 to the Single European Act, 1987*, Working Paper No. 88/328, San Domenico di Fiesole: European University Institute.
- Kramer, L. (1997) *Focus on European Environmental Law*, London: Sweet and Maxwell.
- Lenschow, A. (1999) “Transformation in European Union environmental governance,” in B. Kohler-Koch and R. Eising, eds.: *Transformation of Governance in the European Union*, London: Routledge.
- Livanis, I. (2010) *Conforming or Muddling Through: Explaining Variations in Compliance with European Union Environmental Policy*, unpublished dissertation, Gainesville: University of Florida.

- March, J.G. and J.P. Olsen (2009) *The Logic of Appropriateness*, ARENA Working Paper WP04/09, University of Oslo: Center for European Studies.
- Moravcsik, A. (1991) "Negotiating the Single European Act," *International Organization* 45(1):19–56.
- Moravcsik, A. (2005) "The European constitutional compromise and the neo-functionalist legacy," *Journal of European Public Policy* 12(2):349–86.
- Peters, B.G. and V. Wright (2001) "The national coordination of European policy-making," in J. Richardson, ed.: *European Union: Power and Policy-Making*, London: Routledge.
- Pop, V. (8 January 2010) "This WEEK in the European Union," *EUobserver/Weekly Agenda*.
- Rehbinder, E. and R. Stewart (1985) *Environmental Protection Policy*, Berlin: de Gruyter.
- Rhodes, R.A.W. (1986) "The New Governance: governing without government," *Political Studies* 44:652–667.
- Rhodes, R.A.W. (1994) "The hollowing out of the state," *Political Quarterly* 65:138–51.
- Risse-Kappen, T. (1996) "Exploring the nature of the beast: International Relations theory and comparative policy analysis meet the European Union," *Journal of Common Market Studies* 34(1):53–80.
- Scott, C. (2002) "The governance of the European Union: the potential for multi-level control," *European Law Journal* 8(1):59–79.
- Urwin, D.W. (1985) *Western Europe since 1945*, London: Longman.
- Valadez, J.M. (2001): *Deliberative Democracy, Political Legitimacy, and Self-Determination in Multicultural Societies*. Boulder: Westview Press.
- Ward, S. and R. Williams (1997) "From hierarchy to networks? Sub-central government and EU urban environment policy," *Journal of Common Market Studies* 35(3):439–64.
- World Commission on Environment and Development (The Brundland Commission) (1987): *Our Common Future*, London: Oxford University Press.