

Rhetoric or Reality? ‘New Governance’ in EU Environmental Policy

Katharina Holzinger, Christoph Knill and Ansgar Schäfer

Abstract: *When scrutinising the literature on EU environmental policy, it becomes apparent that there has been a comprehensive transition in underlying governance ideas during the last two decades. At the core of these changes is the abolition of traditional patterns of interventionist command-and-control regulation in favour of economic instruments and ‘context-oriented’ governance. In view of these developments, this article has two objectives: first, it looks into which causes and factors initiated these discussions; second, it analyses the effects these reform ideas had on actual patterns of governance. As will be shown, changes in governance ideas are only partially expressed in changes in policy instruments.*

I Introduction

When scrutinising the literature on environmental policy in the European Union, it becomes apparent that there has been a comprehensive transition in underlying governance ideas since the beginning of the 1990s. Authors are talking of ‘new instruments’ (Héritier, 2002) or even of the ‘transformation of the environmental governance in the EU’ (Lenschow, 1999). At the core of these changes is the abolition of traditional patterns of interventionist command-and-control regulation in favour of ‘context-oriented’ governance, emphasising close cooperation of public and private actors in the formulation and implementation of EU environmental policy.

The great scientific resonance that this reform development has found ought not, however, blind us to the fact that there was already a broad discussion of environmental governance in the 1980s; this was primarily dealt with in environmental economics and at the level of international organisations (OECD, 1981b). This earlier discussion was less concerned with context-oriented forms of governance, but with introducing economic instruments, which were considered substantially more efficient than interventionist measures.

Against the background of these developments, this article has two objectives: first, it looks into which causes and factors initiated these two mentioned discussions; second, it analyses the effects these reform ideas had on actual patterns of governance in the EU. To what extent and in which direction do new governance ideas actually result in the adoption of new policy instruments?

If one considers the various action programmes in which the strategic orientation of the EU environmental policy is defined for the middle term, a relatively sound finding regarding underlying governance ideas becomes apparent. The political demands for

both economic instruments and context-oriented forms of governance are very clearly reflected in the governance ideas formulated in the individual action programmes. Both in the mid-1980s and at the beginning of the 1990s, an explicit paradigm change in regulatory policy was demanded in the respective programmes; this came to expression in formulations about 'second-generation' instruments or 'new governance approaches'.

This change in governance ideas, however, is only partially expressed in changes in concrete instruments introduced in EU environmental law. The discrepancy between political declarations in the action programmes and their actual implementation is especially obvious with respect to economic instruments. However, the introduction of context-oriented instruments has increased relatively little, as well, measured on the political demands. Interventionist instruments still constitute the dominant form of environmental governance in the EU.

The observation is not new that, at the state level, economic instruments in environmental policy are much discussed, but seldom put into practice (Holzinger, 1987; Opschoor and Vos 1989). For the EU-level, however, no analysis of this has yet been undertaken. There have been a few studies about the context-oriented instruments (e.g. Héritier, 2002). These do not deal specifically with environmental policy, however. There has not yet been a comprehensive assessment of the use of instruments in the environmental policy of the EU.

In the following section, we first analyse the reception of economic and context-oriented governance ideas in the various environmental policy action programmes, and investigate the causes favourable to these wide-reaching changes. Building upon this, in third section we explore whether and to what extent the changes in governance ideas have affected the choice and the allocation of policy instruments. The fourth section is dedicated to the explanation of the empirical findings. The general outcomes resulting from this analysis are summarised in the final section.

II The Call for 'New Instruments': Changes in Ideas and Conditions of Governance

EU environmental policy developed as a policy area in its own right from the early 1970s onwards. Initial policies of the Community were primarily command and control instruments, implying a highly interventionist governance approach (Rehbinder and Stewart, 1985, chapter IV). Since the mid-1980s, however, new governance ideas have appeared which aim at re-orienting the choice of environmental policy instruments. Two strains are to be differentiated: beginning in the mid-1980s the EU Commission advocated 'economic incentive instruments', such as environmental taxes, tradable permits, or risk liability schemes. At the beginning of the 1990s, primarily 'context-oriented instruments' were suggested. These aim to leave the Member States more discretion in the implementation, to include the addressees in policy formulation and enforcement, and to prescribe administrative procedures rather than substantial outcomes to be achieved.

A Governance by Economic Incentives

The introduction of economic instruments was first proposed in the third environmental action programme of the Community (1982–1986).¹ The fourth action pro-

¹ OJ C 46 17/02/83.

gramme (1987–1992)² dealt in detail with economic instruments. Emission taxes, emissions certificates, state aid, negotiable deposit permits, voluntary agreements with the polluters, and stricter liability laws were specified. How did this new orientation in the use of instruments come about, and which governance ideas are behind the mentioned instruments?

Instruments such as environmental taxes, tradable permits, subsidies, and voluntary agreements are among the measures in the ‘classical canon’ proposed by environmental economics as superior forms of governance, especially when compared to hierarchical intervention (Binder, 1999). The discussion about economic instruments was especially intense between 1975 and 1985. In the second half of the 1980s this canon was expanded to include risk liability schemes and fund solutions to compensate for environmental damages (Endres, 2000). There are primarily three expectations connected with economic instruments.

First, these instruments correspond to the polluter-pays principle, that is, the normative distribution principle that the polluters have to bear the costs of the pollution that they have caused. By introducing environmental taxes, tradable permits, subsidies, environmental funds, or risk liability schemes, the polluter not only carries the costs of avoiding environmental pollution to a certain limit (usually by some technical device), but also the costs of the residual pollution. In the case of interventionist instruments (e.g. environmental standards), by contrast, the polluter carries only the costs for avoiding environmental pollution insofar as the standard requires that this be avoided. Economic instruments thus implement the polluter-pays principle in a much more encompassing way as it is the case for interventionist measures. The only exception is subsidies: while they are in fact classified as economic instruments, they are not in accord with the polluter-pays principle, but in accord with the common cost principle.

Second, economic instruments are suited to guarantee the optimal allocation of environmental resources. Taxes, permits, and fund solutions are more flexible than regulatory standards and requirements. Environmental protection investments are used where their costs are lowest: as long as the investments to avoid environmental pollution are lower than the costs of taxes or permits, environmental pollution will be avoided; otherwise companies will pay for the residual pollution. In this way, the operational and economic costs of environmental protection will be minimised (Endres, 2000; Frey, 1972; Siebert, 1976). The same applies for emission subsidies. For regulatory standards, by contrast, everyone addressed by the provision is to carry out preventative measures to the same degree, regardless of the individual costs, which might vary greatly (Bea, 1973).

Third, the economic instruments are dynamically efficient. The fact that, when these instruments are used, the residual pollution still has to be paid for gives those addressed by the provisions an incentive to be innovative. As long as a tax must be paid, a pollution permit must be purchased, or one is liable to pay damages for residual pollution, there is an incentive to develop more comprehensive mechanisms to avoid pollution. Regulatory standards do not give rise to this incentive.

In particular, in the mid-1980s the first two expectations induced the European Commission to take over the governance ideas from environmental economics. Two principles connected with these two expectations—‘the principle of compatibility between ecology and the economy’, and the polluter-pays principle—can already be found in

² OJ C 328 7/12/87.

the first and second action programmes for environmental protection. Both principles, however, only became weighty in the 1980s, first the 'principle of compatibility between ecology and economy', and later the polluter-pays principle.

The 'principle of compatibility between ecology and the economy' was formulated in the first action programme.³ Against the background of worsened global economic conditions, this principle was emphasised more strongly in the third action programme.⁴ The Commission feared cut-backs in environmental policy because of the worsened economic conditions. It was significant that environmental protection could be carried out cost-effectively, and under certain circumstances could even contribute to solving economic problems.

This change in the conditions of governance prompted the Commission to deal much more with the question of the most cost-effective instruments. In its interpretation of the third action programme, it argues that it is important to achieve the optimal allocation of the resources 'in the broadest sense of the term'. In this context, the Commission proposed applying a stricter form of the polluter-pays principle. Besides, it was proposed that taxes and permits be introduced. This way, market principles could be used to achieve generally accepted environmental objectives (European Commission, 1984, p. 84).

In the development of the third and fourth action programmes, the Commission pursued the goal implied in the new interpretation of the polluter-pays principle. The initial definition as stated in the first action programme⁵ implied first, that the polluter-pays principle only refers to the costs of avoiding pollution, and not to the entire costs of the pollution. Second, exceptions were permitted as long as they did not impair the general market functions. In principle, however, financial aid does not comply with the polluter-pays principle. Third, this interpretation of the polluter-pays principle was not applicable to international pollution.

In the third and fourth action programmes, the Commission developed an expanded definition of the principle, which was to be achieved with economic instruments. To reduce social costs emerging from residual pollution,

[c]harges constitute one of the instruments for the application of the polluter-pays principle and they can provide an incentive to the introduction of antipollution measures to reinforce the application of standards and stimulate innovation, especially if residual pollution is also covered by the charge. It is necessary therefore to study carefully the fields where charging systems would allow the achievement of the objectives of environment policy more efficiently.⁶

Beyond that, the Commission aimed to make the polluter-pays principle applicable to transboundary pollution. It specified the context of a new interpretation of the polluter-pays principle with 'new instruments', including in particular environmental taxes and charges, liability and funding schemes, as well as international agreements (Ifo-Institute for Economic Research, 1989, p. 5). In the fourth action programme, the same instruments are listed, expanded to include state aid, tradable permits, and negotiated agreements with polluters.⁷

Which changes in the governance conditions prompted the Commission to expand the definition of the polluter-pays principle and the palette of environmental policy

³ OJ C 112 20/12/73; cf. European Commission (1984, p. 15).

⁴ OJ C 46 17/02/83, 4-5.

⁵ OJ C 112 20/12/73, at 6, authors' translation.

⁶ OJ C 46 17/02/83, p. 8.

⁷ OJ C 328, 7.12.87.

instruments? Most important in this respect are the changes in the legal framework, political and ideological developments outside of the Community, as well as a changed problem structure and new environmental priorities in the Community.

First, the polluter-pays principle was integrated into the European Treaties with the Single European Act (Article 174 [ex Article 130r]). The Community was thus bound, without restrictions, to the polluter-pays principle. The Commission took this as an occasion to formulate a broader polluter-pays principle, which would serve as the standard for application, hence avoiding different interpretations of the principle (should it only cover the costs for avoiding pollution or also include residual costs) in the member states.

Second, in the mid-1980s, the polluter-pays principle was also intensively discussed in other international organisations, especially within the framework of the OECD. Various studies on its development were carried out (OECD, 1981a, 1981b, 1994; Opschoor and Vos 1989). Above all, the international and transboundary application of the polluter-pays principle was dealt with at this level.

Third, in the 1980s there was a broad public discussion about the compatibility between environmental protection and the goals of economic growth. At the same time, there was a shift in the global trend of the macroeconomic philosophies: liberalisation, deregulation and a 'return to the market' were the new catchwords. This created a climate in which the plea for 'economic', cost-effective and market-conforming instruments fits well.

Fourth, environmental problems of the early 1970s were different from those that were perceived as the most dramatic at the end of the 1980s. Among the newly perceived problems were hazardous waste and soil pollution, cumulative pollution (soil, water and the green house effect) and pollution from diffuse sources, which no individual polluter is held accountable for. To finance the abolition of hazardous waste, contaminated land and pollution from diffuse sources, fund solutions and liability schemes were established in the United States and some European states. The Commission was very responsive to these developments.

B Context-oriented Governance

The fifth action programme (1993–2000)⁸ marks a second reorientation in EU environmental governance. On the one hand, this becomes apparent in the fact that there are fewer references to concrete environmental problems than in earlier programmes. By contrast, the focus is on governance principles on which the future environmental policy of the EU should be based. Instead of a problem-oriented perspective, we find a primarily governance-related conception (Weale et al., 2000, p. 61). Central to the latter is the principle of 'sustainable and environmentally suited development', on the basis of which economic growth and environmental protection are to be brought into harmony with one another.

On the other hand, the ideas developed in the fifth action programme reflect a major departure from approaches propagated in earlier programmes. Previously dominant approaches, which essentially were based on forms of hierarchical intervention, are to be replaced or complemented with new forms of context-oriented governance (Knill

⁸ OJ C 138 17/5/1993.

and Lenschow, 2000). This comprehensive change in the dominant governance ideas is characterised by various components.

First, effective governance is to be guaranteed by the most comprehensive collaboration possible between public and private actors at the various institutional levels during policy formulation and implementation. The focus is not so much on developing regulative measures as on integrating and consulting with the actors concerned. The 'shared responsibility' of all actors is in the foreground; this ought to be achieved by intensive dialogue with the addressees and the responsible authorities.

Up to the present, environmental protection in the Community has mainly been based on a legislative approach ('top-down'). The new strategy advanced in this Programme implies the involvement of all economic and social partners ('bottom-up').⁹

Second, achieving this requires that the involved actors have enough discretion to optimally align their respective activities with the conditions of the specific political, social, and economic contexts that exist at the national, regional, or local levels. Thereby, the fifth action programme stands in contrast to the orientation emphasised in the third action programme, in accordance with which environmental-policy problems were to be surmounted with uniform emissions thresholds (Johnson and Corcelle, 1989, p. 17). The result of the detailed European specifications was that Member States only had a narrow scope in which to adapt the European specifications to the nationally varying conditions (Knill and Lenschow, 2000).

A third characteristic of governance change implied by the fifth action programme is the development of 'new instruments' to achieve the above-mentioned goals. The instruments proposed in this context all aim to leave responsible authorities and addressees broad discretion for concrete implementation. This ought to be reached by forgoing detailed specifications of contents (such as emission standards). The emphasis is on defining broad objectives (quality objectives) in order to grant the Member States greater scope for action in choosing the means to reach these objectives. Beyond this, environmental instruments shall be largely limited to procedural guidelines, without however providing substantial objectives regarding the results of these procedures. The Commission hoped that this makes greater flexibility possible in adapting to future developments and national contextual conditions (Héritier, Knill and Mingers, 1996).

A second general objective of the 'new instruments' is to explicitly change the national contextual conditions in order to achieve a more effective implementation of the regulatory goals. The instruments ought to create positive incentives for societal actors to voluntarily cooperate and participate in formulating and implementing European environmental policy. In this context, two developments can be differentiated.

For one, the Commission emphasises the development of instruments to improve rights to information and participation of a large group of different state and private actors (Mol, Lauber and Liefferink, 2000). It also emphasised that through wide-reaching information and the use of publicity, the general environmental consciousness and the acceptance of the required environmental measures could be rigorously supported.¹⁰

On the other hand, the forms of hierarchical intervention ought to be increasingly complemented by cooperative arrangements and legally non-binding agreements

⁹ OJ C 138 17/5/1993, p. 17.

¹⁰ OJ C 328 7/12/1987.

between public and private actors. This applies especially to the reduction of industrially caused environmental pollution, where voluntary agreements with industry and forms of private self-regulation should play a major role:

The new approach implies, in particular, a reinforcement of the dialogue with industry and the encouragement, in appropriate circumstances, of voluntary agreements and other forms of self-regulation.¹¹

What background conditions have been favourable to this deep-reaching transition in the governance ideas? A first factor favouring these changes refers to the growing politicisation of the EU's limited policy-making capacity against the background of an increasing number of transboundary environmental problems. Thus, in the face of diverse national conditions and interest constellations, the detailed specification of regulatory policies underlying the interventionist approach implied many drawn-out and problematic decision-making processes at the European level. Interventionist governance thus implied severe disadvantages in terms of the environmental policy-making capacity of the EU.

Through restricting regulatory requirements to generally defined targets, by contrast, the complexity of the European decision-making process was to be reduced. Beyond that, it was hoped that, by surpassing drawn-out and complex European legislative processes through broadly using voluntary agreements with industry there would be greater decision-making capacity and adaptive flexibility in European environmental policy (Héritier, 2002; Mol, Liefferink and Lauber, 2000).

A second problem that is to be overcome by the transition from interventionist to context-oriented governance regards the implementation deficit in European environmental policy. Even though this problem has long been acknowledged, it became significant on the political agenda only at the beginning of the 1990s, because some Member States, given the negative results of implementation, generally questioned the legitimacy of the European environmental policy and pushed to 're-nationalise' the regulative competencies (Jordan, 1999; Krämer, 1996).

Despite very detailed and ambitious policy specifications, problems related to the ineffective implementation of European policies at the national level continually increased (European Commission, 1996). Not only did the comprehensive monitoring of EU requirements prove to be difficult, but also the fact that—in the face of the varying geographic, political, social, and economic conditions at the domestic level—the detailed rules did not always represent the most effective way to achieve the policy results that were aimed at (Knill and Lenschow, 2000).

New governance approaches, which explicitly aimed to take nationally diverse conditions into consideration, were to be used in an attempt to reduce these implementation problems. Beyond that, it was presupposed that including policy addressees in formulating and implementing EU policies would lead to greater acceptance, and thus to effective implementation.¹²

A third factor refers to the subsidiarity principle, which was not only laid down as an environmental policy principle in the EU, but a general principle of action with the Single European Act (SEA) and the Maastricht Treaty. With that, adherence to interventionist governance models, which strongly encroach upon the national scope of action, could hardly continue to be politically legitimated. The subsidiarity principle favoured the development of new governance models, which would merely prescribe

¹¹ OJ C 138 17/5/1993, p. 14.

¹² OJ C 138 17/5/1993, p. 17.

broad targets for the Member States, but not the means to achieve these targets (Collier, 1998).

Fourth, the governance changes in the EU environmental policy resonated well with a more general and global reform wave, characterised by catchwords such as 'privatisation', 'liberalisation', the 'withdrawal of the state' and 'new public management'. The goals regarding the development of less bureaucratic, more flexible, and more effective governance concepts, all of which arose from this general reform development, favoured and legitimised the formation of synchronised patterns of context-oriented governance at the European level (Lenschow, 1999, pp. 40–41).

This development was reinforced by a Commission-ordered study, which among other things, analysed the repercussions of European and national environmental legislation on the job market, and on the economic competitiveness of the Member States (Collier, 1998, p. 15). The Molitor report, published in 1995, called for a new approach to environmental governance, which specifically was to include greater scope for the national implementation of European laws and more flexible and less hierarchical forms of governance (European Commission, 1995). In this way, it was to be ensured that the EU environmental policy had no negative repercussions on the international competitiveness of the European economy.

In sum, our considerations show that since the mid-1980s two general lines of development can be observed regarding the development of EU environmental governance. Both depict a close connection between changes in the politically perceived or defined governance conditions and the observable transition in governance ideas that transcend the diverse environmental action programmes.

The interventionist philosophy, which earmarked the EU environmental policy from the beginning of the 1970s, was initially called into question as economic instruments were accentuated: this was especially evident in the third and fourth action programmes. In the fifth action programme, at the beginning of the 1990s, there was once again a new orientation towards context-oriented governance ideas. The focal point was cooperation between public and private actors in formulating and implementing European environmental policy as well as the flexible development of policies against the background of diverging conditions at the national and sub-national levels.

III The Development of the Use of Instruments from 1967–2000: Changes in Modes of Governance

Although these changes in governance ideas in the respective action programmes of the EU can be clearly understood and substantiated, this must not necessarily imply that this transition is actually reflected in the empirically observable changes in policy instruments, as the environmental action programs of the EU are merely declarations of political intentions, in which general guidelines and goals are defined. This, however, by no means gives rise to a legal obligation to actually pass such measures. Against this background, in the following section it will be more closely investigated whether, and to what extent, the change in governance ideas has been accompanied by corresponding shifts in governance modes.

A Data Basis

To do so, we studied the development of the use of instruments in EU environmental policy from 1967 until 2000. The first environmental policies were passed in 1967, and

2000 was the last year of the fifth action programme. All of the measures in this time period that followed explicit environmental policy objectives were investigated. The basis for the data is the systematic compilation of EU environmental law by Haigh (2000). Even though this collection is incomplete, it does include most of EU legal activities with regard to the environment, and, in any case, all of the important ones that were passed in the EU in this time period. In addition, the legal sources themselves were referred to, and information from the Commission's General Directorate for the Environment was also consulted.

A simple listing of the instruments implies that they are weighted equally. Differences in the relevance of the individual measures are not apprehended in this way. Yet, this procedure appears justified, given the difficulties in finding clear criteria for determining relevance. Problems arise not only in the choice of criteria (should the number of actors affected serve as the basis, the benefits for the environment, the initial adoption of a measure or the continuation of one?), but also in the process of evaluating them.

The legal acts were classified according to the central types of instruments (standards, financial aid, right to information, etc.) and modes of governance (interventionist, economic, context-oriented). Those governance techniques with the priority of reaching the objectives of the measure were classified as central instruments. This procedure implies that accompanying measures and supplementary provisions are not listed. The number of such secondary measures per legal act varies considerably. They are largely related to the procedural specifications of interventionist measures such as the right to information vis-à-vis the Commission.

B Empirical Findings

To determine whether and to what extent the changes in governance ideas resulted in concrete changes of policy, we listed all EU environmental legal acts that were passed in the time period under study with reference to their central instruments. On the basis of the differentiation between the various governance ideas from the previous section, the latter can be subdivided into three broader governance modes.

The first mode refers to interventionist instruments, which encompass not only emissions and quality standards, but also technical specifications, prohibitions and other restrictions, and obligations. In the time period under investigation, the second type of economic instruments only appeared at the European level in the form of financial assistance. In individual directives, such as the ones on car emissions or the disposal of used oil, Member States are explicitly authorised to introduce economic incentives, such as tax reductions. This does not mean, however, that economic instruments are introduced at the European level. Rather, the definition of EU-wide emission or technical standards is the focal point of these measures. Included among the third governance mode, i.e. context-oriented instruments, are quality targets, certifications, the right to information, campaigns and appeals, voluntary agreements as well as measures that aim at improving the coordination of the environmental policy activities of the Member States.

The data clearly demonstrate that—regardless of the innovation in governance ideas—interventionist instruments still play a dominant role. Although the action programmes strongly emphasised the need to introduce economic instruments, this is hardly reflected in any noteworthy political measures. In addition, financial assistance, the only economic instrument used in the period under study, is hardly up to the goals

Table 1. Share of the various instruments and the governance modes in EU environmental policy

Governance Mode/Type of Instrument	Absolute Frequency	Relative Share [%]
<i>Interventionist instruments</i>		
Emission standards	51	19.5
Quality standards	34	13.0
Technical specifications	14	5.4
Prohibitions (products, assets)	38	14.6
Production and trade restrictions	17	6.5
Declaration obligations	8	3.1
Preventative obligations	5	1.9
Information and data inquiry obligations	54	20.7
<i>Economic instruments</i>		
Financial aid	11	4.2
<i>Context-oriented instruments</i>		
Quality targets	8	3.1
Certification	2	0.8
Information rights	2	0.8
Campaigns, appeals	3	1.1
Voluntary agreements	10	3.8
Coordination of Member State policies	4	1.5
Total	261	100.0
Interventionist instruments	229	84.7
Economic instruments	11	4.2
Context-oriented instruments	21	11.1

formulated with the expanded polluter-pays principle. In other words: the economic instruments passed by the EU were not really the instruments propagated in the third and fourth action programmes. The planned introduction of a CO₂/energy tax failed in the early 1990s because of the resistance of the Member States. The only present approach for introducing economic instruments appears in the measures adopted in 2003 for implementing the Kyoto Protocol by creating an 'EU market' for CO₂ emissions, using tradable permits.

In addition, the share of context-oriented instruments appears to be relatively small, especially if one considers that the fifth action programme was supposed to comprehensively expand such governance modes. Although the discrepancy between governance ideas and governance modes is not quite as clear as it is for economic instruments, it can nonetheless be maintained that the programmatic reorientation of governance, as it has emerged since the mid-1980s in the individual action programmes, has thus far obviously not detracted from the dominance of the interventionist instruments.

Although the share of economic and context-oriented instruments seems relatively small in general, this must not necessarily mean that the development of the new governance ideas is of little significance for the allocation of environmental instruments in the EU. The influence of new ideas might become apparent insofar as the relative share of economic and context-oriented governance modes increased over time. This relationship is analysed in Table 2, which summarises the development of the relative shares of the various governance modes for the time period of the individual action programmes, and for the period just before these.

Table 2. Share of the different governance types in the different time periods (with reference to the action programmes)

Time Period	Governance Type			
	Interventionist %	Economic %	Context-oriented %	Total %
1967–1972	100.0	0.0	0.0	100.0
1973–1976 (1 st AP)	100.0	0.0	0.0	100.0
1977–1981 (2 nd AP)	88.0	0.0	12.0	100.0
1982–1986 (3 rd AP)	100.0	0.0	0.0	100.0
1987–1992 (4 th AP)	82.4	2.9	14.7	100.0
1993–2000 (5 th AP)	78.6	7.7	13.7	100.0

In fact, we see that before the adoption of the fourth action programme, EU environmental policy basically relied upon interventionist governance modes. Certain deviations from this pattern can only be observed during the second action programme, in which 12% of the measures were already context-oriented. These were quality targets and information campaigns. Economic instruments were first used during the fourth action programme, and there was an increase in their use during the fifth action programme. This, however, was merely a matter of financial assistance—as is made clear in Table 1. Context-oriented instruments were again used during the fourth and fifth action programmes. Contrary to the declaration of the fifth action programme, however, there is no increase in the use of context-oriented instruments in this final phase, although various new instruments, such as voluntary agreements, certification, or the right to information, have been introduced for the first time.

As a whole, since the mid-1980s there has been a reduction in the use of interventionist regulation in comparison to economic and context-oriented governance modes. However, this development cannot be immediately connected with the respective political declarations in the action programmes. This is demonstrated by the fact that the use of context-oriented instruments had already increased during the fourth action programme, although corresponding governance ideas were only introduced with the fifth programme. The reorientation of governance ideas with the fifth action programme may thus be understood as a confirmation of a development that had already appeared earlier.

IV Explaining the Gap between Ideas and Their Application

The analysis of EU environmental policy between 1967 and 2000 has shown that the discussion about the new forms of governance in fact only led to minor changes in the instruments employed. The goals aimed at in the discussion about economic instruments were not achieved at all. Those related to the goals of context-oriented governance were only partially achieved. Obviously, there was a marked change in environmental governance ideas. But there was no corresponding change in the governance modes actually used. What are the factors that account for this gap between the emergence of governance ideas and their limited application in practice?

A Functional Restrictions on Instrument Substitution

A first factor to explain the still unchallenged dominance of interventionist regulation in EU environmental policy rests on functional arguments, emphasising that there is

only limited room for substitution of interventionist regulation by economic or context-oriented approaches. With respect to the substitution of interventionist regulation by context-orientation, important restrictions emerge from the objective of harmonisation underlying many environmental policies at the European level. As context-oriented instruments explicitly emphasise discretion for national adjustment and the definition of domestic regulatory requirements within rather broad objectives and guidelines, they are hardly suitable in order to achieve harmonised levels of national regulation. It is rather their basic objective to allow for regulatory variety.

In many cases, however, harmonisation constitutes a central motivation of EU environmental policy. Harmonisation arguments are particularly pronounced in the case of environmental product standards (e.g. emissions standards for cars). The establishment of the internal market requires the harmonisation of standards in order to avoid trade barriers and distortion of competition. The trade-oriented rationale was especially dominant as long as there was no explicit legal basis for the development of EU environmental policy. Environmental measures had to be legitimated by economic rather than environmental objectives—a constellation that changed only with the Treaty revisions established in the 1987 SEA. Moreover, national industries typically have a common interest in harmonising product standards, as the adjustment of product characteristics to different national standards would increase production costs. As a result, industry in both high-regulating and low-regulating countries benefits from uniform product standards (Holzinger, 2002; Scharpf, 1997).

As regards process standards, high-regulating countries, in many instances, display a strong interest in the harmonisation of environmental standards for production processes (e.g. emissions from large combustion plants). They want to avoid economic disadvantages for their industries subject to competition from their counterparts in low-regulating countries. Although the low-regulating Member States might strongly resist such efforts (given the implied loss of competitive advantages), the EU has adopted a considerable amount of environmental process standards. This result, which departs from more sceptical expectations of theories of regulatory competition (Holzinger, 2002; Scharpf, 1997), can be understood against the background of the particular dynamics underlying EU environmental policy-making, including, in particular, compensation payments to potential harmonisation losers, package deals as well as first-mover advantages for Member States seeking to establish innovative regulatory approaches at the European level (Héritier, Knill and Mingers, 1996). Taken together, these aspects might explain that high-regulating Member States to a considerable extent succeeded in establishing harmonised process standards at the EU level.

From the interventionist measures investigated in this article, almost 45% (103 policies out of a total of 229) define environmental product standards. Another 35% (80 policies) refer to process standards. This means that by far the largest part (80%) of EU environmental policy is not only based on the objective of environmental protection, but also characterised by a strong interest in harmonising domestic standards. Only 20% (46 interventionist policies) are neither linked to product nor to process regulation and hence have no impact on competition within the internal market. It is only for these policies that context-oriented instruments constitute a feasible alternative. For most of the existing policies, however, context-oriented instruments interfere with underlying harmonisation goals, with substitution offering no functionally equivalent option.

Certain restrictions also exist for the substitution of interventionist regulation by economic instruments. In the literature, it is generally argued that the comparative

advantage of economic instruments over interventionist regulation is confined to specific constellations in which instruments are characterised by the common objective of reducing or stabilising maximum emissions levels for a given region (Endres, 2000, p. 117). The total of emissions of all polluters in a region shall be restricted to a certain limit. The whole scientific discussion on potential benefits of economic instruments rests on the assumption that they are applied in this specific context.

As a consequence, economic instruments constitute a viable alternative to hierarchical intervention only in cases in which environmental regulations are directed at the achievements of clearly defined objectives concerning emission or environmental quality standards for a certain region. Following the classification of environmental instruments in Table 1, this constellation applies to 85 (51 emissions standards and 34 quality standards) of the 229 interventionist policies investigated, implying that around 38% of the interventionist measures can be adequately substituted by economic instruments. By contrast, economic instruments can hardly be seen as feasible option to replace other types of interventionist regulation, such as technical specifications, prohibitions, production, and trade restrictions, declaration obligations, or information obligations. In these constellations, the underlying regulatory objectives can hardly be achieved by market-oriented principles as applied in environmental taxes or tradable emissions licences.

The above considerations show that there are important functional restrictions on the complete substitution of interventionist regulation by context-oriented or economic instruments. Restrictions are particularly severe for context-oriented instruments, given their interference with harmonisation objectives underlying around 80% of the interventionist policies. Functional restrictions thus constitute a quite powerful and plausible explanation to account for the small share of context-oriented measures in EU environmental policy. The explanatory power of this argument is much lower, however, when it comes to economic instruments. Although certain limits for replacing interventionist regulations also exist in this case, they are less pronounced. One therefore should expect a considerably higher share of economic instruments, especially when compared to context-oriented measures. As demonstrated by our data, however, this is not the case. Economic instruments play an even more minor role in EU environmental policy than context-oriented instruments. In the following, we therefore need to look for additional factors, which might inhibit the application of economic instruments.

B Lack of Political Support for Economic Instruments

Environmental economists have proposed economic instruments since the 1960s. Until the beginning of the 1990s, however, economic instruments were actually introduced only in few instances in the OECD world (see Table 3). Prominent early examples are the introduction of the so-called 'emissions trading' in the US Clean Air Act of 1977, or the introduction of the German wastewater tax in 1978. During the 1970s and 1980s some more environmental taxes were implemented in Europe, in particular in Scandinavian countries and The Netherlands, as well as in the United States, Canada, and Japan. In sum, however, there was no clear shift towards economic instruments.

The background for this hesitance to employ economic instruments was lack of political support on the side of almost all political actors. Environmental economists have provided several theoretical conjectures to explain the lack of acceptance on the side of the most important political actors. They propose three reasons why industry

Table 3. Use of economic instruments in selected OECD countries, 1987 and 1997

Country	Tradable Permits		Taxes**		Risk Liability		Charges		Subsidies		Deposit Systems	
	1987	1997	1987	1997	1987	1997	1987	1997	1987	1997	1987	1997
Belgium*	0	0	1	12	1	0	2	2	4	0	0	0
Canada*	0	2	0	5	0	2	2	16	1	3	1	1
Denmark	0	1	1	16	0	2	3	10	4	9	1	3
Germany*	0	0	3	6	1	1	3	6	9	0	1	1
Finland	0	0	2	11	1	3	2	14	9	9	1	2
France	0	1	4	6	1	0	2	10	8	1	1	1
Greece	0	0	0	5	0	0	2	5	2	3	0	0
UK	0	0	1	3	0	0	2	1	5	9	0	0
Italy	0	0	2	5	0	0	2	9	7	0	0	0
Japan	0	0	2	5	0	2	0	6	0	4	0	0
Netherlands	0	0	4	9	1	0	3	2	10	18	1	2
Norway	0	0	4	16	0	0	0	3	1	5	1	2
Sweden	0	0	5	17	0	2	1	10	1	7	1	2
Switzerland*	0	1	2	7	0	0	1	5	1	9	0	0
USA*	2	4	2	7	0	1	1	3	3	4	0	0
Total	2	9	33	130	5	13	26	102	65	81	8	14
Poland	—	1	—	9	—	0	—	3	—	1	—	1
Czech Republic	—	0	—	4	—	0	—	5	—	3	—	0
Hungary	—	0	—	12	—	0	—	13	—	0	—	0

* Only federal level

** Data is based on OECD (1997)

Source: Opschoor and Vor, 1989; OECD, 1997, 1999; authors' calculation

can be expected to reject tradable permits and taxes. First, compared to standards both permits and taxes are more expensive for them, because they must also pay for the residual pollution. Second, individual standards can usually be negotiated with the administration, while permits and taxes cannot be influenced. Third, interventionist measures often restrict competition for the 'old firms' in a market, because newcomers are usually subject to stricter standards. Two explanations are given for governments' and politicians' hesitance: first, it is assumed that governments do not like to tie themselves down to precise political goals as is necessary with environmental taxes and licences. A second speculation is that for politicians it is most important that the benefit of a political measure can be attributed to them. This is not the case with economic instruments. For the environmental administration, economic instruments imply a loss of competences and power because the instruments work automatically after introduction, and because the administration does not have discretion in the implementation process. Lastly, several reasons are given why environmental organisations and the general public are not in favour economic instruments. First, it is assumed for these groups that there is lack of information and comprehension of the functioning of economic instruments. Second, they are only interested in the benefit and not in the cost aspect of environmental policy. Third, economic instruments imply the explicit allocation of rights to pollute. This may offend values (e.g. Binder, 1999, pp. 187; Frey, 1972, chapter VIII).

Whatever the reasons actually were, an empirical study by Holzinger shows that there was in fact a lack of acceptance of economic instruments during the 1980s. The

preferences for economic instruments of various political actors were analysed: government, environmental administration, industry, environmental organisations, and political parties. The study relates to the German political discourse and is based on document analysis and a questionnaire. The study shows that all actors preferred interventionist environmental policy by classical standard-setting to other instruments. Most actors bluntly rejected tradable permits. Similarly, most actors rejected environmental taxes. An exception was the Free Democratic Party, which was in favour of both permits and taxes. The Green Party accepted taxes only for the purpose of financing environmental expenses, not because of their allocation effects. Subsidies were openly demanded by industry, whereas all other actors rejected them—at least under this name. Using different terms, however, such as ‘environmental assistance’, most actors actually proposed or accepted subsidies. In sum, until the middle of the 1980s there was little political support for economic instruments (Holzinger, 1987, chapters 6 and 7). Although the study is restricted to Germany, given the small number of economic instruments actually introduced in the OECD countries in 1987 (see Table 3) it can be assumed that the situation was not much different elsewhere.

This situation of general lack of support seems to have changed during the 1990s. Table 3 shows that the use of economic instruments has considerably increased between 1987 and 1997. There are now four times as many tradable permits, taxes, and charges as in 1987; the use of liability schemes and deposit systems has doubled, and subsidies have increased by 30%. Although the OECD data have to be taken with care since they are partly based on questionnaires and self-classifications of the countries and only partly on scientific studies for the OECD, the trend is obvious at least for some of the instruments.

The data suggest an increase of political acceptance of economic instruments within OECD states. An important background for this is the fact that green movements seem to have now accepted economic instruments as a means to achieve higher environmental quality. This became obvious when environmental NGO’s supported the international emissions trading system for CO₂ negotiated at the Kyoto conference and its follow-ups. A second factor is surely that the OECD has actively promoted the use of economic instruments (see section 2A). However, if the use of economic instruments, and especially of environmental taxes and charges, has clearly grown at the national level of European OECD countries, why are there still so few economic instruments at the EU level?

C Particulars at the EU Level

A closer look at the OECD data shows that in case of tradable permits the raise is not so impressive in absolute numbers. There are nine permit systems in 1987 compared to two in 1987. Five of the seven additional cases are found outside the EU, namely in the United States, Canada, and Switzerland. Tradable permits are still relatively unusual in EU member countries and it is thus not surprising that we do not find a permit system at the EU level until 2000. In 2003, however, as a consequence of the international climate negotiations the EU has developed a permit system for CO₂ emissions for its Member States, which will soon be implemented.

Similarly, the absolute number of strict liability instruments is small. They increased by eight new cases, five of them in non-EU countries, four in two small EU Member States, namely Denmark and Finland. Therefore, in the case of risk liability it is again not surprising that there is no such instrument at EU level.

The number of deposit or refund systems (in most instances for beverage containers) is small, as well. Five out of six new deposit systems were introduced in EU Member States. This can thus be seen as a typical European instrument. The EU level might also be affected by such an instrument, because products (and thus, competition) are concerned. In fact, in one instance, the Danish bottle case, the European Court of Justice was involved. However, the environmental value of deposit systems is much disputed. Furthermore, the national traditions with respect to the use of beverage containers vary widely. The idea of EU-wide deposit systems thus does not make much sense.

The increase of subsidies of about 30% in the OECD countries is mirrored by the development at the EU level. The use of subsidies at the EU level rose from 2.9% in the period from 1987 to 1992 to 7.7% in the period from 1993 to 2000 (Table 2). That is, subsidies have more than doubled. Thus, the EU is at least representative of the development in the OECD countries in this case.

In the cases of environmental taxes and charges the number of instances of application is four times as high in 1997 than in 1987 for the OECD countries, whereas there are still no instances at EU level. For environmental charges this has a simple functional reason. Environmental charges and levies, for example for waste collection, drinking water, and wastewater are usually employed at the local level. They are rather a price for a public service than a politically designed economic instrument with allocation functions. The EU itself does not provide such services and does not have the legal competence to impose charges on citizens in Member States. Moreover, these services usually have no transboundary effects and no implications for trade and competition policy. The policies concerned do simply not affect the EU level. Consequently, there is no need for such provisions at the EU level.

We are therefore left with environmental taxes. This is the only instrument for which there is a considerable increase within OECD states and within EU member states (67 new instances after 1987), for which policies affecting the European level are concerned, and which constitutes a viable alternative to hierarchical intervention in many cases. Thus, all conditions for the European use of this instrument are fulfilled. The EU Commission actually wants to promote this instrument and acceptance of environmental taxes within the member states has obviously grown during the last decade. Why then is there not a single instance of an environmental tax at the EU level?

To our knowledge there was only one proposal for such a tax, namely the combined CO₂/energy tax, developed by the Commission and negotiated in the Council from 1991 to 1993. The proposal failed, since the required unanimity of Member States could not be achieved, given fierce resistance of concerned national industries. There were some other projects for environmental taxes developed by Commission officials, which, however, never reached the level of official negotiations within the Council.¹³

This story contains a clue for explanation: In tax matters, unlike in most other environmental matters, there is still unanimity in the Council required. Tax matters are very sensitive, because they are related to the notion of national sovereignty. It can be assumed to be anticipated by the Commission as well as by Member States willing to introduce a particular environmental tax that unanimity is required and difficult to achieve whenever taxes are concerned. The actors hesitate to come up with such a proposal—especially after the experience of the failure in the CO₂/energy case.

¹³ Personal communication with Commission official, 17 May 2003.

The 'explanations' given here are *post-hoc*. They do not strive to be a scientific explanation. They are an attempt to understand why we do not see any economic instruments apart from subsidies at the EU level, although the Commission intended to promote them, although they are a practicable alternative to emission standards, and although the political support for these instruments obviously increased during the last decade.

V Conclusion

In the current political and scientific discussion on EU governance, there is often an implicit assumption that the relevance of classical patterns of hierarchical intervention has been significantly reduced in favour of 'new forms of governance'. It was our objective to analyse the extent to which two types of new governance ideas (economic and context-oriented instruments) have actually resulted in changes of regulatory patterns in EU environmental policy. As demonstrated by our empirical evidence, there is a broad gap between the political and scientific advocacy of new ideas and their actual implementation through corresponding changes in underlying policy instruments.

The normative discussion that began in the mid-1980s in the EU Commission about introducing cost-saving instruments did not result in changes in practical affairs. New governance ideas related to context-oriented instruments did not lead to great changes in the actual use of instruments either. Moreover, even before the fifth action programme, there were already other instruments of this sort, such as target values, and information campaigns. Over the long run it has become clear that some of the new context-oriented instruments were already introduced before they were programmatically codified in the fifth action programme. The new governance ideas thus appear to have existed, and to have had some consequences, some time before they were officially declared.

The obvious gap between governance ideas and their implementation, as it emerges from our empirical findings, can be explained by several factors. There are functional restrictions to the substitution of interventionist instruments by context-oriented or economic instruments. Additional problems can be identified for the introduction of economic instruments. This holds true in particular for environmental taxes which interfere with the fiscal sovereignty of the Member States. As a result, Council agreements are particularly difficult, not least because of the fact that unanimity still is the relevant decision-rule for all tax-related decisions. This explanation seems to be more important than the argument that Member State resistance to economic instruments is primarily the result of potential costs of adjustment of national interventionist legacies to economic instruments advocated by the EU. This can be traced to the fact that OECD data indicate a considerable increase in the use of economic instruments at the domestic level. Against this backdrop, institutional adaptation costs can no longer be seen as the most decisive factor to account for the small share of economic instruments in EU environmental policy.

References

- Bea, F. X. (1973). 'Die Verteilung der Lasten des Umweltschutzes nach dem Verursacherprinzip', *Das Wirtschaftsstudium* 2, pp. 453–457.
- Binder, K. G. (1999). *Grundzüge der Umweltökonomie*. Vahlen.

- Collier, U. (1998). 'The Environmental Dimensions of Deregulation: An Introduction'. In: U. Collier (ed.). *Deregulation in the European Union. Environmental Perspectives*. Routledge, pp. 3–24.
- Endres, A. (2000). *Umweltökonomie*. Kohlhammer.
- European Commission (1984). *Zehn Jahre Umweltpolitik der Europäischen Gemeinschaft*. European Commission.
- European Commission (1995). *Report of the Independent Group of Experts on Legislative and Administrative Simplification*. Commission of the European Union.
- European Commission (1996). *Implementing Community Environmental Law*. Communication to the Council of the European Union and the European Parliament. Commission of the European Union.
- Frey, B. S. (1972). *Umweltökonomie*. Vandenhoeck & Ruprecht.
- Haight, N. (ed.) (2000). *The Manual of Environmental Policy: the EC and Britain*. Catermill Publishing.
- Héritier, A. (2002). 'New Modes of Governance in Europe: Policy-making Without Legislating?' In: A. Héritier (ed.), *The Provision of Common Goods: Governance Across Multiple Arenas*. Rowman & Littlefield.
- Héritier, A., Knill, C. and S. Mingers (1996). *Ringing the Changes in Europe. Regulatory Competition and the Transformation of the State*. de Gruyter.
- Holzinger, K. (1987). 'Umweltpolitische Instrumente aus der Sicht der staatlichen Bürokratie'. *Ifo-Studien zur Umweltökonomie* 6. Ifo-Institut für Wirtschaftsforschung.
- Holzinger, K. (2002). 'The Provision of Transnational Common Goods: Regulatory Competition for Environmental Standards'. In: A. Héritier (ed.). *Common Goods: Re-inventing European and International Governance*. Rowman & Littlefield, pp. 57–79.
- Ifo-Institute for Economic Research (1989). *The Polluter Pays Principle and Environmental Impacts*. September 1989.
- Johnson, S. P. and G. Corcelle (1989). *The Environmental Policy of the European Communities*. Graham & Trotman.
- Jordan, A. (1999). 'The Implementation of EU Environmental Policy: A Problem Without a Political Solution?' *Environment and Planning C. Government and Policy* 17, pp. 69–90.
- Knill, C. and A. Lenschow (eds) (2000). *Implementing EU Environmental Policy. New Directions and Old Problems*. Manchester University Press.
- Krämer, L. (1996). 'Defizite im Vollzug des EG-Umweltrechts und ihre Ursachen'. In: G. Lübke-Wolff (ed.), *Der Vollzug des europäischen Umweltrechts*. Erich Schmidt Verlag, pp. 7–36.
- Lenschow, A. (1999). 'Transformation in European Environmental Governance'. In: B. Kohler-Koch und R. Eising (eds), *The Transformation of Governance in the European Union*. Routledge, pp. 39–60.
- Mol, A. P., Lauber, V. und D. Liefierink (eds) (2000). *The Voluntary Approach to Environmental Policy*. Oxford University Press.
- OECD (1981a). *An Assessment of the Implementation of the Polluter-Pays-Principle*, Environment Committee, Group of Economic Experts. Paris: May 1981.
- OECD (1981b). *The Implementation of the Polluter-Pays-Principle: A Review of Member Countries' Practices* (A Summary of the Replies and the Replies from Member Countries). Paris: October 1981.
- OECD (1994). *Managing the Environment: The Role of Economic Instruments*. OECD.
- OECD (1997). *Evaluating Economic Instruments for Environmental Policy*. OECD.
- OECD (1999). *Economic Instruments for Pollution Control and Natural Resources Management in OECD Countries: A Survey*. OECD. Working Party on Economic and Environmental Policy Integration.
- Opschoor, J. B. and H. B. Vos (1989). *The Application of Economic Instruments for Environmental Protection in OECD Countries*. Final Report. Paris.
- Rehbinder, E. and R. Stewart (1985). *Environmental Protection Policy. Integration Through Law*. de Gruyter.
- Scharpf, F. W. (1997). 'Introduction: The Problem-solving Capacity of Multi-level Governance', *Journal of European Public Policy*, 4, pp. 520–538.
- Siebert, H. (1976). *Analyse der Instrumente der Umweltpolitik*. Otto Schwartz & Co. (in cooperation with W. Vogt).
- Weale, A., Pridham, G., Cini, M., Konstadakopulos, D., Porter, M. and Flynn, B. (2000). *Environmental Governance in Europe. An Ever Closer Ecological Union*. Oxford University Press.

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