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**“Steering through Complexity: EU Environmental Regulation in the International Context”**

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## I. Introduction.

European Union (EU) scholarship is taking an increasing interest in the issue of 'governance.'<sup>1</sup> This exploration runs parallel to the growing public policy and public administration interest in how current political and societal conditions are shaping governance, defined here as the capacity of governments or designated public actors to steer their economy and society in a goal-oriented way that differs from what the spontaneous cooperation of actors in the markets and society might achieve.<sup>2</sup> EU scholars on the whole have tended to use the concept of governance to move the theoretical focus on EU integration beyond the role of states.<sup>3</sup>

This paper aims to synthesize these analytical concerns, in order to place EU steering in the larger international context of governance. It asks how the member state governments, the Commission, and other key actors are trying to shape environmental regulation in the face of new governance challenges posed by an increasingly complex international arena. In order to explore the ideas about environmental governance and influence, we examine two policy areas that the EU and other organizations have invested considerable regulatory effort: the risk management of chemical substances and the control of the hazardous waste trade.

Our argument accepts that the relationship between the European state and the society it regulates is changing, with the European Union assuming a greater role in this process. However, the two cases present a cautionary tale about how well the EU is able to steer in one of its most comprehensively institutionalized policy sectors. The governance challenge the EU faces involves a number of key elements. Well understood are the problems posed by the uncertain and complex nature of the environmental issues.<sup>4</sup> The esoteric nature of the environmental issues gives a power to technical knowledge as well as symbolism and new ideas. Member state governments, the Commission, ngos, and other actors will manipulate these instruments to shape EU regulatory outcomes in a way that traditional intergovernmental models of EU policy making do not expect. However,

many complex environmental issues have a significant international dimension that forces the EU policy process to interact with other political structures and actors. This creates the potential for institutional fluidity which cohesive political coalitions use to shape the institutional constraints that they face. In this context, certain international institutions, such as the OECD and UN, and non-governmental organizations (ngos) may trigger governance responses different from what the EU Commission and national governments intend. The actors who set the agenda and coordinate the fragmented process will be central in determining the EU regulation direction.

## **II. The Changing Nature of Governance.**

Public administration studies of governance focus heavily on the balance between the governing and societal actors.<sup>5</sup> In examining this, Kooiman *et al.* note the rise of complexity (e.g. in the economic, political and administrative organization of society, the increased importance of technology, and the increase of problems with ambiguous cause and effect relations), more diverse relationships within the political processes, and more varied societal perspectives.<sup>6</sup> This reality creates conditions of policy uncertainty, involving social problems that are difficult to separate and disentangle and where the response depends on technical and political knowledge which is dispersed among a number of actors. The logic of this challenge leads to governance relying more on the coordination efforts provided by networks of public and societal actors.

Rhodes shares some of these assumptions in his examination of the 'hollowing out' of the British state.<sup>7</sup> He argues that the boundaries of the public and private spheres are shifting, reflecting the interdependence between these organizations. Governance will involve these 'self-organizing, interorganizational networks', where the participating organizations need each other to exchange resources and negotiate aims and rules of behavior.<sup>8</sup> These networks have a considerable autonomy from the state, which can only indirectly steer the networks.

It is important in this context not to exaggerate the diminishing presence of the state. Peters notes the political legitimacy and the associated obligations of responsibility accorded to state actors that necessarily sustains the state role.<sup>9</sup> Furthermore, within the domestic context, some actors must work to bring the different outputs of the networks together.

The European Union and transnational interactions further complicate this picture. Sbragia notes that the accumulation of regulatory measures and constitutionalized principles by the EU. This suggests an important measure of steering not represented by domestic networks.<sup>10</sup> The range of environmental legislative items is now over 500.<sup>11</sup> The legislative measures have increased significantly in terms of scope and stringency in a manner that cannot be explained purely as an effort to sustain the single market.<sup>12</sup> With its expansion into the environmental realm, the EU is a critical governance arena through which its diverse actors negotiate policy directions. Possessing only a small supranational staff and limited budget, the EU must also make use of networks to guide European action.<sup>13</sup> These networks, required to operate over national territorial boundaries, tend to lack the self-organization found in the domestic systems.<sup>14</sup>

This paper carries the multi-level argument one step further, contending that the EU process is part of an international process. Both the domestic and European organizations shape the international environmental effort, but this system of transnational actors is defining European governance as well.<sup>15</sup> In the environmental context, the problems of uncertainty and the imperatives of scarce information and technical resources are compounded by issues with global scope. The environmental problems and solutions also tend to have disruptive effects in other key transnational priorities, such as economic growth and trade and pollution impact that crosses over national and regional boundaries. Embracing this transnational dimension complicates even further the European picture of networks by extending the fragmentation both vertically and horizontally - transnational actors will operate at the various domestic levels of country while domestic, and EU,

issues and actors may at times push their agenda at the international level.<sup>16</sup> With this dimension we can more fully elaborate on the elements of EU environmental governance.

#### *A. The Importance of Rule-making*

At the heart of the European integration effort has been the growth of the European regulatory state. There is a larger trend in European governance that states must turn to indirect means for exerting control and accountability over networks and actors providing public benefits for society. Majone argues that this governance development at the state level has combined with the EU institutionalization process.<sup>17</sup> Lacking the budgetary resources and powers, the EU institutional process provides strong guidance for the member states through rules which impose implementation costs on member states and the economic costs on societal actors. On the surface, the far less binding nature of international agreements (relative to the EU system containing a heavily influential judicial mechanism) would suggest a minimal impact on this system. As a participant in various international organizations and regimes important for European welfare, EU supranational and member state actors have a considerable interest in ensuring that the complex EU regulation does not conflict with those priorities. The utility of international institutions adds another dimension. Theoretically, individual states should be able to coordinate their policies in a manner that does not require a regulatory structure at the EU or international level. In reality such efforts run into coordination problems due to lack of information ( a point covered below) and issues of credibility.<sup>18</sup> Although the international institutions do not have the direct sanctions power available to the EU, they may prove useful for delegating technical matters, particularly if they have access to wider range of international information than possessed by the individual EU member states.

#### *B. The Importance of Knowledge and Expertise*

An extremely important dimension of regulatory policy is that it relies heavily on the 'scientific, engineering, and economic knowledge' required to design the measure.<sup>19</sup> At the same time, the scientific understanding of the cause and effect relationships are often

uncertain in regulatory policy, which tends to make those actors who can persuade others with arguments and knowledge even more influential. Both of these considerations are particularly true of environmental policy in the EU and international contexts. A number of the critical environmental issues are simply too complex (often involving transnational implications) for the national officials to handle independently.

The EU Commission has an advantage in having access to a number of policy networks operating at a national, European, and international level.<sup>20</sup> Speaking more broadly, the multiple points of access in the EU institutional system give a wide range of groups the opportunity to influence the EU process through information and other forms of persuasion.<sup>21</sup> Given the limited official resources, the Commission and Council apparatus are dependent on the expertise available at the domestic level. In areas of high policy uncertainty, expert communities and groups with established belief systems (i.e., advocacy coalitions/epistemic communities) may play a guiding role. The Commission, for example, uses this linkage in turn to try and influence the domestic agenda. Although the Commission may be in a better position than the EU member states to coordinate responses because of the information it receives from various societal actors, its bureaucratic structure is too small to create comprehensive policy for a number of transnational environmental policy problems.<sup>22</sup>

There is a second dimension to this knowledge, and that concerns the ability of the actors to understand the complex EU and international environmental policy process in a way that best achieves their political aims. Actor and organizations need to have the experience to exert persuasion and influence where it will be most effective. With the regulatory contribution that the EU participation in international organizations makes, this challenge becomes even more difficult.

### *The Importance of Institutions*

As has been indicated in the previous section, the importance of institutions and the way they structure environmental actor behavior is essential to understanding how the EU

works. In the EU arena, there is a complex system of institutions; the policy process must run through this chain of actors, which act as veto points that compel their agreement. One consequence of this system is that organizations such as the Commission that seek the initiative will have to look for opportunities to steer policies in a favorable direction.<sup>23</sup> The Commission may seek to build on member state initiatives and then set the agenda in a way that the national actors do not grasp the full implications. However, the existence of these veto points usually requires actors to compromise where the important implications of the regulations are perceived. Moreover, both the supranational organizations and the member states need to form coalitions to sustain their initiatives across these veto points.<sup>24</sup> While international organizations may not have institutional bodies with the same level of autonomy and independence found in the EU, EU participation in international agreements adds another layer of institutional structure where actors have to search for consensus. This requirement may alter the balance of coalitions within the EU as the EU players have the potential for forming alliances and seizing on ideas provided by a wider range of the community.

#### *The Fluidity of Arenas*

One valuable but less understood aspect of institutional analysis is that, while institutions help to structure the activity of the players who operate in them, these same players will be constantly striving to influence and change this institutional context to better suit their individual policy aims.<sup>25</sup> Political structures tend to be slow to change as the rules and beliefs they contain usually evolve gradually. This makes it attractive for actors to search for political arenas that do not have well defined rules or have more favorable political balances.<sup>26</sup> The actors can use these fora to push their own aims and to insert new ideas that change the status quo.

Given the regulatory linkage between international institutions and EU environmental policy, a system of multiple arenas has developed which European actors can exploit to manipulate the agendas in advantageous ways. Actors with a transnational orientation can

go ‘forum shopping,’ i.e. exploring which of these arenas would most favor the particular policy positions.<sup>27</sup> The characteristics of each arena (the EU, OECD, *et cetera*) can be seen to provide different kinds of access and advantage. This has the potential for redefining the EU environmental policy agenda in a way that makes it more difficult the Commission and Council to maintain control of the policy agenda. These EU bodies may have to pursue their governance aims in these arenas, often with less predictable results.

#### *Summary of the Implications for EU Actors*

In such a governance environment, actors need to have the scope to operate across the national, European, and international political boundaries. They must be able to handle the political challenges with sufficient experience and knowledge to seize opportunities while also having the capacity to deal with the policy uncertainty present in the issue. Finally the actors require a cohesion and issue intensity sufficient to track the issue across these multiple levels. This may be possible for business and environmental ngos, particularly if they have an important role in well-organized policy communities and epistemic communities that operate effectively across these levels. Given the demanding nature of this criterion, however, public officials in the Commission and the member states operating through the Council of Ministers may still have the pre-eminent role in providing strategy and coordination. Policy networks that extend over territorial boundaries tend to be rare; many actors, such as ngos, lack the resources and coherence to operate effectively across these levels.<sup>28</sup> However the resources necessary to sustain this across the complex environmental problems may constrain consistent input from all actors, enabling different players at different times to define the policy problem and solution.

### **III. The Recent Changes in EU Governance.**

As the disarray in the Commission hierarchy will continue to play itself out in the latter half of 1999, it is difficult to predict how this will affect the Commission’s ability to govern. Much of the environmental objectives set before the crisis should continue. The



Commission is continuing to evolve in terms of developing new incentives and approaches to regulation. These efforts create flexibility for implementing actors while still protecting the environment. This trend started before the crisis and will continue.<sup>29</sup> Some larger political decisions may be hampered, but the basic regulatory pattern for this functional area seems likely to continue when the Commission consolidates its position.

One aspect of regulatory governance that may continue to drive the EU forward is the fact that the dynamic tension between leader and laggard states will continue.<sup>30</sup> The 1995 expansion of the EU membership to include three states that seek rigorous environmental controls has helped to move the regulatory agenda forward. In this context, one would expect the leader states to form a coalition promoting such aims; the rumor of an 'Eco-Schengen' (formed by Austria, Denmark, Finland, Germany, the Netherlands, and Sweden) did receive some attention.<sup>31</sup>

While this is an intriguing possibility, a key actor group in this paper is a smaller regional bloc already in existence, namely the Nordic Council. Given the difficulty of handling and managing information and issues across multiple national and transnational arenas, smaller regional blocs can be used to amplify the effectiveness of national actors well beyond that which they would enjoy alone. The Netherlands and the Nordic countries—led by Denmark, Sweden and Norway—have been particularly influential in international environmental politics. Brenton has noted:

Being small, they were well habituated to the setting of environmental standards through international agreement and had long experience (for example in the North Sea, acid rain and ozone layer negotiations) of setting environmental negotiating targets, which other countries were then pressured by their public opinion into accepting.<sup>32</sup>

The admission of Sweden and Finland to the EU have brought new tensions between these 'vanguard' states and those with less enthusiasm for strong environmental policy action, because the Nordic accession changed the balance within the EU and encouraged greater

ambition on their part to maneuver the EU into a stronger position. The Nordic states have employed tactics which enhance their influence but which also have produced tensions within the EU. Equally these tactics have provoked non-EU members to engage in the policy process in ways which have added further complexity to the governance task.

The key to Nordic influence lies in their highly coordinated approach to international politics, an approach which builds upon close historical relations between Nordic countries. There is a history of Nordic interest groups stretching back to the 1860s. In international conferences, the Nordic states have often acted as a group or a caucus, with their most notable early success coming in the 1966-67 Kennedy Round of GATT negotiations.<sup>33</sup> Nordic cooperation now occurs in a formal sense through the Nordic Council, established in 1952 although permanent secretariats and a Council of Ministers were established only in 1971.<sup>34</sup> The Nordic Council members are Denmark, Finland, Iceland, Norway and Sweden. The Council brings about closely coordinated policy positions, often through one state representing Scandinavian interests in executive organs of international institutions. Denmark, Finland, Norway and Sweden have very similar positions on environmental policy, having concluded a Convention on the Protection of the Environment (the Nordic Convention) in 1974.

The effectiveness of the Nordics was demonstrated by their success in achieving international progress on the issue of long-range transportation of air pollutants, such as sulfur oxides which cause acid rain.<sup>35</sup> With their ecosystems particularly vulnerable to acid rain damage, the Nordics pushed the issues in all possible fora. They focused their efforts initially in the OECD, and succeeded in getting a number of studies conducted and eventually a report prepared on the problem.<sup>36</sup> After 1976, the Scandinavians shifted their agenda-setting effort to the UNECE, and succeeded in having adopted in 1979 a largely political document with few teeth - the Convention on Long-Range Transboundary Air Pollution. The Scandinavian representatives pressed for an actual requirement for sulfur

dioxide emissions to be reduced, and lobbied the European Community (EC), but there was little momentum before the acid rain issue became a serious political problem in the Federal Republic of Germany, which then pushed this agenda within the Community. In the evolution of acid rain policy in both UNECE and the European Community was stimulated by the development of the 'critical loads' methodology.<sup>37</sup> Scandinavian scientists played a significant role in developing this method which was spread evangelically to other European scientific communities. The resulting epistemic community managed to convince Nordic and later UNECE policy-makers to embrace the approach. The knowledge has been incorporated into UNECE protocols following the LRTAP Convention of 1988, though as a tool for argumentation rather than as the basis of standard-setting.<sup>38</sup> As active participants in the UNECE process, the Commission and the EU have incorporated the approach in the current EU strategies for air pollution. The Scandinavian success was due in no small part to their dominance within this epistemic community.

This brief example also demonstrates the successful Nordic use of another governance strategy. This approach is a kind of 'Trojan Horse', which uses non-threatening arenas such as the OECD and 'framework' conventions in a process of setting precedents. These precedents subsequently can be expanded along previously designed lines. This is not just a case of 'forum shopping', but of precedent setting within one forum, and then using that progress to advance the agenda in another, more restrictive arena. Such coordination can be both effective and reduce the costs of participation for small or medium states, especially when combined with 'forum shopping'. The use of multiple arenas to progress agendas may only be largely understood by their own negotiators, and typically becomes apparent to others only as details emerge.

The Nordics are not alone in their use of this strategy. European Union officials also find the OECD a useful conceptual forum in which to work out ideas such as environmental

taxation.<sup>39</sup> The use of the 'safe arena' provided by the OECD has become more critical as the EU has grown in importance. The greater supranational thrust of the EU on environmental policy and other sectors has given rise to acute political controversy, whereas the commitment to the coordination of economic growth, the organizing principle for the OECD, has traditionally been less threatening to member state autonomy. This contributes to its success as harmonizing body.<sup>40</sup> In the OECD the EU members are forced to participate individually although they also meet as a caucus. This can be strategically important, enabling other players, such as the US, to engage EU members individually. It allows EU members to seek allies in another forum on issues on which they might be facing defeat within the EU.

The two case studies illustrate how the play of issues in multiple arenas adds a challenging new complexity to the EU (and national governments and international organizations) governance problem. The first, the amendment of the Basel Convention to ban hazardous wastes export from OECD to non-OECD parties shows the Nordic countries acting outside the EU arena to force change in EU policy. They take advantage at one point in the process of Norway's non-membership of the EU to advance the Nordic Council agenda when the constraints of EU membership limited the Danish ability to do so. The second, the regulation of chemical risk in the EU, demonstrates how Swedish attempts to pursue their domestic policy agenda on chemical phase-outs in multiple arenas resulted in moves by non-EU members, who saw their significant interests in non-ferrous metals disadvantaged by the EU process, to maneuver risk assessment of copper and zinc out of the EU arena and into a UN arena perceived as less threatening.

#### **IV. Basel**

##### *The Original Convention*

The history of hazardous waste regulation with explicit transnational implications dates at least as far back as the European Community's regulations on waste (EC 75/442) and toxic and dangerous waste (EC 78/319) which foundered on the ambiguities surrounding the definitions of 'waste' and 'hazardous waste'.<sup>41</sup> In 1983 the European Commission and most member states wanted the regulation to affirm the free movement of waste, and this principle was embodied in Directive 84/6311, which incorporated a prior informed consent (PIC) approach. Greenpeace and the European Parliament (EP) strongly opposed the privileging of the free market principles concerning hazardous waste.

In 1984, both the OECD and UNEP also started to develop responses to transboundary waste shipments. The OECD Waste Group essentially based their definitions on the EC definition of hazardous waste. UNEP took the OECD work as the basis for its initiative, and in 1988 the OECD and UNEP decided to merge the decisions of the two organizations (showing the considerable interdependence among these organizations). Also in 1984, the United States adopted PIC legislation and negotiated bilateral agreements with its two largest hazardous waste recipients - Canada and Mexico.

There was, however, a lack of uniformity in these various approaches and also concern about the lack of capacity of some countries to enforce bans on imports. Moreover, there was a widespread belief that much of the waste was being dumped at sea to maximize profits, instead of the legal trading with developing countries.<sup>42</sup> In 1985, a UNEP working group produced the Cairo Guidelines, which were adopted by the UNEP Governing Council in June 1987. This soft-law response established procedures for the managing and disposing of hazardous wastes, the prior notification and consent by the receiving state, and the verification by the originating state that the receiving state's disposal requirements were at least as stringent as those of the originating state.<sup>43</sup> Without the power of sanctions behind it, the act nevertheless laid out certain ideas and norms of regulatory behavior which would gather weight. After 1987 Switzerland initiated a move

towards a global convention which was adopted at a plenipotentiary conference convened by UNEP in Basel in March 1989.

Belgium and the Netherlands continued to push within the EC for the Community to join an agreement, but the successful negotiation came only after considerable disagreements in the UNEP Governing Council.<sup>44</sup> The exporting states such as the US, UK and Germany demanded nothing more rigorous than a PIC regime and the Developing Countries were unable to force any change in Basel. The US gave the importers an ultimatum of accepting a PIC regime or having to accept the status quo. The Organisation of African Unity proposed amendments which would have prevented exports to countries which did not have the same standard of facilities and technology as the exporting country and would also have required inspection of disposal sites by UN inspectors.<sup>45</sup> Greenpeace attacked the convention for regulating rather than banning trade, and, by allowing industry to continue to export their waste problems cheaply, failing to discourage waste generation.<sup>46</sup>

Initially, many developing countries refused to sign the Basel Convention on the grounds that it failed to ban trade outright. Some 94 Developing Countries adopted unilateral bans on imports, and some industrialized countries favored converting Basel into a regime with a ban rather than regulation. This concern led to the Fourth ACP-EEC Convention of Lomé concluded on 15 December 1989, It banned movements of hazardous wastes from the Community to 68 countries, unless the importing country had appropriate disposal facilities.<sup>47</sup>

The OECD continued its efforts in waste regulation, developing a three-tiered (Green, Amber, Red) classification system for recoverable wastes in 1991, which the Community later used as the basis for its own legislation, with the adoption of Regulation 259/93 to control waste shipments into and out of the EC. Again, the OECD was an important

precedent-setting arena for key EU environmental regulations, providing both political and technical solutions for handling problems.

The Commission, Germany and the UK were opposed to a prohibition approach to waste trade, but the Danes, the Dutch, the EP, and Greenpeace pushed for stronger measures, wanting a complete export ban on all waste including recycling. This resulted in the EU agreeing to a ban on all waste exports for disposal outside the EU and EFTA countries under the Treaty of Lomé. The French government in particular shifted its ground on this position. EC states could even forbid the importation of waste if it could be disposed of closer to the originating site (the 'proximity principle'). This marked a move away from the view that waste was a good to be traded.

The European Parliament and Greenpeace, still dissatisfied for the allowance of trade, continued to press for further action. Denmark moved unilaterally to push for an OECD export ban, against the Community convention that the Commission acts for the EC in the context of treaties. On 9 February 1993 the EC adopted Regulation 259/93 on the Supervision and Control of Shipments of Waste within, into and out of the European Community which became effective on 6 May 1994. This Regulation enabled the Community to sign onto the Basel Convention - an example of an international arena setting the EU agenda. The Regulation prohibited exports of wastes from EC states to non-EC states for disposal, with those for recovery operations governed by the three tiered control system adopted by the OECD (Red, Green, Amber).

#### *Negotiating a Stricter Ban*

At the First Conference of the Parties (COP-I) in 1992, UNEP Secretary-General Mostafa Tolba used this opportunity to try to strengthen the Convention by proposing a ban on exports to Developing Countries and Eastern Europe. He argued that the Convention had done little to halt 'toxic terrorism' with wastes following the path of lower costs and lower

standards. Finland, Denmark, Norway, Switzerland, Italy and Sweden endorsed an OECD to non-OECD ban, but strong opposition came from the US, Germany, Canada, Australia, the United Kingdom and Japan. The final resolution merely called for a halt to exports, with exports for recovery exempted. The G-77 was dissatisfied with this compromise.<sup>48</sup> Denmark broke ranks with the European Union at COP-1 and joined the G-77 call for a ban. The Danish government used its control of the EC Presidency in the first part of 1993 to push for an OECD export ban and notified the other EC governments that they would lobby for a total ban at the 1994 Basel Convention meetings. Within Europe, again Norway, Sweden, Switzerland, and the Netherlands supported this effort while Belgium, Britain, and Germany continued their opposition. The Commission believed that the Community rules were adequate and that Denmark was acting unilaterally.<sup>49</sup> An institutional issue accordingly developed in the middle of this debate as the Commission struggled to bring the weight of the institution rules down in support of a particular position. The Commission saw the various future Danish actions as undermining the institutional norms concerning how the Community would conduct international negotiations.

At COP-II in 1994, Denmark submitted a proposal banning all OECD waste exports to non-OECD countries. The Commission felt compelled to build a compromise EU position, which largely reflected the EC commitments under the Lomé Convention. This position supported a ban under certain conditions. There should be a ban on exports unless a party wished to import. The system was under the control of the Basel Secretariat, which would have been required to ensure that appropriate treatment and disposal facilities were in place.

The collapse of this EU position was crucial to the eventual outcome, as there were only three proposals on the table — the European Union proposal, the G-77 proposal for an immediate total ban, and the Danish proposal for a total ban from 1995. The position of



the US, Canada, Japan, Australia, New Zealand (who were completely isolated) was that exports should be permitted unless a country refused them.<sup>50</sup>

The Danish delegation worked apart from the EU from the start. Greece was in the Presidency chair for the EU. There are marked north-south differences evident within Europe on attitudes to environmental questions, reflecting levels of wealth and perceptions of risk. Whatever the reasons, the Danes decided not to work through the Greek Presidency, instead seeking to undermine the EU position throughout the Conference. The EU did not have a unanimous position on day one of COP-II, and it was argued initially that Danes should fall in with the EU majority position. The Danes refused to conform, and, as a result, throughout week of the meeting the EU had to soften its position because the Commission itself could not take a position without consulting the Council of Ministers which had no stable consensus. Throughout this period, the Danish representatives worked on developing countries and its fellow EU partners, particularly Germany.

At this point the G-77 threatened to call a vote. Greenpeace announced to the international press that a vote would likely be necessary to overcome the intransigence of a handful of nations opposed to the ban - a group Greenpeace labeled the 'Sinister Seven', consisting of Australia, Canada, Germany, Japan, the Netherlands, the UK and the US. Greenpeace brought considerable pressure to bear on the 'Sinister Seven', issuing 18 Press releases in March 1994 before the point in COP-II when Decision II/12 was adopted. These were aimed at depicting the Sinister Seven as isolated<sup>51</sup> and seeking to defend a trade which amounted to 'toxic colonialism'. France, Italy and the Netherlands also came in for criticism although Australia, Canada and Germany were especially targeted. Direct actions were undertaken in the Philippines and Australia against trade in computer scrap and lead scrap, and against Germany for shipping out-of-date chemicals to Albania as part of an aid program. Here is an example of a transnational ngo completely outmaneuvering

other transnational actors (particularly industry) which had not grasped the nature of Greenpeace tactics, which were based not on technical argumentation but moral principles that provided a good media focus.

The threat of a vote was widely discussed in the halls of the conference, and it introduced an unpredictable element into proceedings. It takes only one country to call a vote, and it was not clear how the numbers stacked up. Support for the ban soon grew, however. China requested to co-sponsor the G-77 proposal on the first day. On Day Two, a number of former communist states which feared they would become dumping grounds for waste from the west (and which had plenty of waste of their own) joined the G-77 and China. Hungary, Slovakia, Croatia, Slovenia, Ukraine, Poland, Czech Republic, Estonia, Latvia and Romania all voiced their support for the total ban.

The G-77 refused point blank to negotiate on the issue of the ban, indicating it would negotiate only on the date on which a ban would take effect. On Day Three, the pressure began to tell, and the Netherlands, fearful of the electoral reaction if it opposed G-77, abandoned the EU position, stating it would support whatever G-77 wanted. On Day Four Italy buckled and presented a new proposal which borrowed language from all three proposals on the table to produce a face-saving proposal for the EU. Greenpeace considered this was actually the strongest proposal of all.<sup>52</sup>

A meeting of the EU Council of Environment Ministers took place on the 24<sup>th</sup> of March, the penultimate day of the conference. The G-77 was pushing for the ban on both export for final disposal and export for recycling from OECD to non-OECD countries to have immediate effect. Denmark and G-77 lobbied Germany hard; the German and UK ministers later attributed their reversed position to pressure from developing countries. The Council of Ministers gave the EU a mandate to secure a phase-in for the ban on export for recycling to 1998, with some flexibility to negotiate, but the EU representatives

were instructed to defend as long a phase-in period as possible. The Danish Minister, Svend Auken, undermined the EU position, advising Greenpeace and G-77 to push the EU on the question of the date for implementation as they had some flexibility in their mandate. As a result, a further year was shaved off the phase-in period.<sup>53</sup>

This was an example of the EU being maneuvered into taking a decision outside its normal decision processes which it probably would not have reached otherwise. It became necessary subsequently to modify the EU law to reflect this change. Although the Nordic Council may not have played an explicit role, the coalition had its impact as the EU had to give some weight to the viewpoints of the accession states, Sweden and Finland, which supported the Danish thinking.

This left only Australia, Canada, Japan and the US holding out. They negotiated to postpone the effective date and weaken the language, using as leverage the possibility of adopting the decision by consensus rather than by a vote, which might have left some countries feeling disenfranchised, isolated, and perhaps unwilling to make financial contributions to the convention's general fund. Australia had been elected Chair of the COP, and was therefore constrained from playing an active blocking role.

A closed-door negotiating session late into the Thursday night saw Canada, the US, Japan and Australia negotiate against the ban, along with the EU, despite the fact that the EU common position had been reversed that day, with the Commission claiming sole competence on international negotiations under the subsidiarity principle. In an indication of the strength of feeling the behavior of Denmark had engendered in the EU, Commissioner for DGXI Laurens Jan Brinkhorst forbade Svend Auken to sit in the negotiations on the side of the ban proponents even though Denmark had sponsored one of the original ban proposals. The ban proponents were represented by Sri Lanka, Antigua and Barbuda, the Bahamas, El Salvador, Colombia, Senegal, Egypt and Poland. In the end, the negotiating

group produced a text very similar to the Italian proposal, which was agreed to by consensus on the final morning.

Concern over the effects of the ban on recycling provoked suggestions in Germany that the COP-II decision was not legally binding because it was not written into the Convention. The Commission raised the issue of whether the EU was legally bound by the 1994 agreement unless the Basel Convention was formally amended. This led to the Danes in 1995 to propose that the EU should settle the issue by pushing for the ban to be incorporated into the Convention.<sup>54</sup> Observers anticipated that the UK and Germany would kill this proposal in the EU, and they hinted that they would reconsider their ratification if the Danish proposal was accepted. The US representation stated it would not ratify the Convention if the ban went ahead.<sup>55</sup>

Germany, the United Kingdom, and European Commissioners for Industry (DG-I) and Foreign Trade (DG-III) also reportedly attempted to block the implementation of the ban within the EU. After the European Commission refused to recognize the ban as binding, Denmark, Sweden and Finland sent a proposal independent of the EU common position to the Basel Secretariat, waiting the required six months notice required for an amendment to the Convention to formalize the ban. This action clearly transgressed the principle that only the Commission has competency in international arenas, and, like the earlier Danish action at COP-II and in relation to Lomé, it provoked condemnation from the Commission and many member states. The Commission threatened legal action and instructed the Convention Secretariat that the Nordic proposal was illegal. The gambit, however, did produce results, with the European Parliament voting 407-3 in April 1995 in support of implementing the ban, allowing incoming (Danish) Environment Commissioner Ritt Bjerregaard to propose incorporation of the ban into European Union law. Perhaps even more significant, the Council President, France, also supported the proposal for a complete ban. In the end, Bjerregaard won a majority support within the Commission

(against the wishes of the heavyweight economic DGs) for a proposed ban based on the Basel decision.

Subsequently the Commission proposed a ban prohibiting the export of EU hazardous waste starting in 1998 and agreed to seek an amendment to the Basel Convention. Against the wishes of Britain and Germany, the council granted the Commission the mandate to negotiate the Convention amendment in June 1995. A combination of the increasing reality of qualified majority voting in the Council and Danish efforts to build alliances isolated the German and UK positions enough to convince these states to accept the mandate. This reality shows the importance of institutional constraints.

The amendment to the Convention was finally proposed at COP-III by Norway, not a member of the EU, but a member of the Nordic Council. At issue was more than the outcome of the Basel Convention decision, but the fate of environmental policy within the EU. Sweden joined the EU on 1 January 1995 with a grace period of four years to harmonize its policies (including environmental policies) with those of the EU; Denmark had for some time been acting as something of a maverick on environmental policy in the EU, and Denmark and Commissioner Bjerregaard could be seen as attempting to bring the EU into line with Sweden. On 9 December 1996, the Environment Council of the EU agreed to amend Regulation 259/93 to ban all hazardous waste exports for recycling to non-OECD countries.

## **V. Chemicals Risk Management in the European Union**

### *The Regulation and the Implementation Problems*

Given the ever increasing importance of chemicals for the economic health of European industrial societies and the stark political consequences of the noted chemical disasters, the management of chemicals is an extremely vital issue. However the attempt to assess the risk of these chemicals as they interact with the complex modern environment is fraught with difficulty and uncertainty. Because of this uncertainty, regulators attempting to

control these substances must gather all available data and calculate the risk, which is the probability that a harmful result will result from a particular chemical agent interacting with a potential susceptible subject.<sup>56</sup>

On 23 March 1993, the Council of Ministers of the European Communities (now European Union) adopted a Regulation on the evaluation and control of the risks of existing substances (EC 793/93).<sup>57</sup> This regulation covers producers or importers of about 2,000 high production volume (HPV) chemicals, which were produced or imported by single companies in quantities in excess of 1,000 tons per annum. These actors within 12 months must provide the Commission with specified data concerning the quantity produced, uses, properties, pathways and environmental fate, ecotoxicity and toxicity, carcinogenicity, mutagenicity and 'any other indication relevant to the risk evaluation of the substance.' (Article 3). Within 24 months, the regulation required a somewhat more limited set of data for substances produced in quantities between 10 and 1,000 tons and appearing on the European Inventory of Existing Chemical Substances ( or EINECS, a list of 100,000 substances reported on the EC market when the list was drawn up in 1981).

The Commission was then to develop lists of priority substances, or groups of substances, requiring immediate attention because of their potential effects on man or the environment (Article 8). In drawing up these priority lists, the Commission was to take into account: the effects of the substance on man or the environment; the exposure of man or environment to the substance; the lack of data on the effects of the substance on man and the environment; the work already carried out in other international fora; and other EC legislation. The task of risk evaluation was then to be shared among member states, with a rapporteur to be appointed from among the competent authorities.

This amounted to an enormous task, and it could only be undertaken with the use of some quick and inevitably dirty methods for prioritization. The Risk Assessment and Environmental Quality Division of the Netherlands Ministry of Housing, Physical Planning

and Environment on behalf of the Commission had developed the methodology for assembling data sets into a priority list. This work was assisted by an Informal Working Group on Priority Setting (IPS) which included representation from the Swedish Environment Protection Agency of Sweden in anticipation of admission to EU membership. A method for priority setting was the first step of an anticipated risk management process, to be followed by *Hazard assessment*, *Risk assessment*, and *Risk management*. Significantly, *Risk evaluation* was absent, and *Risk assessment* was confined to 'the assessment of the probability of the occurrence of harmful effects.' Any consideration of economics was missing.<sup>58</sup> While the conception of risk management employed stated that 'In practice high risk does not necessarily mean that risk reducing measures are taken,' this model attempted to base risk management primarily upon science.<sup>59</sup>

The aim was to develop a priority setting method which had a scientific basis and was quick, systematic and computerized, transparent, flexible, accurate, and based on a ranking system.<sup>60</sup> The over-riding concern was to process what information there was available for chemicals as quickly as possible in order to meet the tight mandated deadline. The limitations - and explicitly political nature of the model - were quite clearly implied by the authors of the proposal:

If it turns out that the application of additional information requires much expert input or takes a lot of time, it is proposed to ignore it at this stage and include it at a later stage, when 'politically important chemicals' can be merged into the final priority list.<sup>61</sup>

The authors noted that the results of the IPS priority setting method would only be indicators of hazard potential and might have to be revised in following stages of the priority setting process due, for example, to incorrectness of data used or due to use of default values unnecessary for hazard assessment.<sup>62</sup> It is important to note the political content in this decision within the overall context of highly technical decision-making; the

policy actors with their expertise had the ability to define the criteria, which reflected as much policy values as it did science, but without the intense political glare. The approach to risk management was essentially reductionist,<sup>63</sup> but like most such approaches, had embedded within it certain assumptions which reflected underlying institutional factors.<sup>64</sup>

Perhaps the most significant example of this was the way in which the model treated synthetic chemicals and non-ferrous metal products, which reflected the much greater importance of the chemical industry within Europe relative to non-ferrous metals. This contrasted with the greater relative significance of metals in non-EU states, such as Australia and Canada. This difference within Europe was reflected in the size and effectiveness of the relevant European sector groups, CEFIC and Eurometaux.

A serious problem with the model for the metals industry was the way in which weightings were applied to different kinds of uses which were assumed to correspond to exposures. Data on use patterns had to be given values by assigning substances to four groups 'according to the likely exposures resulting from their use and from the technology employed.' At one extreme, those chemicals used in closed systems were weighted at 1 percent. At the other, those in 'wide dispersive use' were weighted at 100 percent. This assumption minimized the impact of the regulatory system on substances used by the chemical industry as intermediate products within chemical works. Substances such as methyl isocyanate (an intermediate product in pesticide production leaked by the Union Carbide Bhopal plant) or dioxin (released at Seveso) which are used only in closed systems, would be given by this model 1 percent of the weighting assigned to chemicals with 'wide dispersive use', such as metallic copper which fared poorly in the model. This method, of course, makes some huge assumptions about the relative safety of industrial chemical processes and metals which are not even bioavailable in the form in which they are most widely used.



On the basis of such assumptions, on positive scores for human toxicity, and some conservative default values, copper was ranked seventh of all hazardous chemicals and included on the second EU priority list for further investigation for risk reduction. This result was rather perverse given the fact that the highly dangerous sulfuric acid only registered at 352. There was reportedly some embarrassment over this result, and copper and zinc were subsequently removed from the second priority list after lobbying by industry - although other metals have also fared poorly (e.g., nickel was placed on the third priority list).

### *Political Struggles in the Arena*

The means by which copper and zinc were removed from the EU priority lists demonstrated the influence that international arenas can have on more narrow EU policy. Australian and Canadian industry managed to persuade their respective governments, the International Copper Association, and the International Lead-Zinc Research Organization to sponsor under UN auspices the preparation of International Program on Chemical Safety (IPCS) Environmental Health Criteria (EHC) documents for each of these chemicals. Because of a tacit agreement among international institutions involved in chemical policy governance to avoid duplication, the EU dropped consideration of these two chemicals. The EU member state competent authorities had agreed that an existing Risk Assessment report on a substance arising from work in other fora could either lead to (a) its being set aside if that report indicated the substance was of low concern, in which case the ranking was likely to be low; or (b) to its being adopted as a candidate for fast track review if the report recommended risk reduction or indicated the substance was of concern.<sup>65</sup> Once the IPCS had decided - thanks to the 'generous' provision of funding - to proceed with the preparation of EHC documents, the EU (at the UK urging) dropped copper and zinc from the priority lists for risk assessment.

Although no explicit rationale was given for the Australian and Canadian governments taking action to shift risk management of copper and zinc out of the EU and into a UN arena, it had the effect of placing the issue in a wider arena where the EU would have less control. The action addressed the concern of both domestic mining industries about the essentially reductionist EU approaches to risk management and which might have led to product restrictions.

The IPCS EHC documents are internationally-accepted, peer-reviewed hazard assessments. They do not attempt to make risk assessments, which require consideration of exposures and values which vary between nations and render problematic risk assessments at the international level. The metals industry feared that risk assessments based on European exposure conditions and values developed under EC793/93 would set a precedent for other arenas, and so moving consideration of these two metals to the IPCS was important. But the motivation for doing so was heightened by the fact that risk management of chemicals was also proceeding in yet another arena — the OECD Chemicals Program. Metals were also faring poorly compared with synthetic chemicals in this arena, thanks to the lesser development of metals industry associations at the international level and the dominance of the synthetic chemicals industry in the relevant sector of the Business and Industry Advisory Council (BIAC) of the OECD.<sup>66</sup>

From the late 1980s, Sweden had been active in this OECD arena, seeking to extend its substitution principle under its 'Sunset Program' for existing chemicals and quite explicitly seeing the OECD as a precedent-setting arena for other fora, especially important given its entry into the EU.<sup>67</sup> Sweden's strategy of using non-threatening arenas to advance its agenda and gradually build greater national commitments was stated quite explicitly:

Sweden's strategy in international environmental work must be characterized by the objective of achieving large environmental benefits with limited resources. The choice of organization and working method must be determined from one case to another. In some cases, it may be appropriate to work through commissions in

which countries enter into binding agreements to reduce discharges of various substances, which in turn may facilitate the imposition of measures limiting the use of various substances. In other cases, it may be more effective to work in forums of a more general nature, such as the OECD's Chemicals Programme, where the work may be expected to have repercussions in a wider circle of manufacturing countries.<sup>68</sup>

This forum shopping strategy raised the question of how much other concerned states — EU and non-EU alike — would be willing to allow Sweden to shape the international regulation of chemicals. Risk management inherently involves exposures and values which vary at the national level. Sweden was seeking to internationalize its domestic policy approach to chemical risk, in order to harmonize the policies of others with its own. Swedish authorities were using the OECD Program to set international precedents and to further their domestic agenda focused on particular 'sunset' chemicals, rather than to deal with issues of transboundary risks. This latter point was evident in the following passage:

In the OECD's Chemicals Programme, KEMI [Swedish National Chemicals Inspectorate] has laid emphasis on the need to establish a consensus on chemicals that should be phased out — 'sunset chemicals'. On Sweden's initiative, an ad hoc meeting was held in Stockholm in March 1990. As a result, the OECD has initiated a 'Risk Reduction Project', where restrictions on the use of chemicals involving their complete or partial (sunset) phase-out are an important component. It may be seen as a step forward that concrete risk-reduction measures are being discussed under OECD auspices. Previously, such matters were considered to be the member nations' own prerogative.<sup>69</sup>

Sweden's actions set off alarm bells in the non-ferrous metals industry. The Swedish had managed to have five chemicals it had previously singled out for phase-out on the Swedish 'Sunset Program' in 1991 adopted as pilot substances by the OECD.<sup>70</sup> Three of these five were metals: cadmium, lead, and mercury. Work to phase out the use of lead and mercury had commenced in Sweden in 1989, with an Act adopted in 1991 to phase out the use of lead in the long term, largely by use of voluntary measures using what it termed the 'substitution principle'. Swedish officials saw the OECD Chemicals Program as an arena 'where the work may be expected to have repercussions in a wider circle of manufacturing

countries.<sup>171</sup> Their reasoning was that the 'OECD's work focusing on substances and products receives a great deal of attention in the world of international chemicals, and agreements in the OECD have a tendency to spread to non-members.<sup>172</sup>

The Swedish aim was to obtain political support for risk reduction in the OECD and for decisions to reduce risks in practical cases, for example 'not to permit any new uses of cadmium, mercury and lead.<sup>173</sup> KEMI therefore actively pursued the development of an OECD Council Act specifying agreed risk reduction measures for lead,<sup>174</sup> not just within the OECD, but also in the Nordic Council. The Nordic Ministers of the Environment met at Tromsø, Norway on 15 November 1994 and agreed that lead should be substituted, wherever technically and economically feasible, and new uses should be prevented. They stated that 'the international dimension of the problem [called] for powerful international action. An OECD Council Act on risk reduction of lead would constitute a valuable contribution to such an international action.' The Nordic Council therefore urged the OECD to develop an Act on lead which encouraged member countries 'to continue national action to reduce exposure to lead in areas not yet covered by international agreements.'<sup>175</sup>

The high ranking of copper and zinc on the EU priority lists under EC 793/93 must therefore be seen in this context of forum-shopping by Sweden and its Nordic allies. Australia and (to a lesser extent) Canada blocked the adoption of a Council Act on lead within the OECD, where a non-binding Ministerial Declaration sponsored by Australia was adopted instead. It argued that chemical risk management activities should occur primarily at the national level and received support on this point within the OECD from several EU members (Austria, Germany, Italy, and the UK). The states apparently shared the Australian and Canadian nervousness over Swedish ambitions.

The prospect of Sweden being able to exert a significant influence over the risk management of copper and zinc under EC 793/93 (within an EU in which the balance had shifted in favor of the Nordics and other 'vanguard' states) therefore lay behind the counter tactics of forum shopping of Australia and Canada, extracting chemicals from what they saw as a hostile arena and shifting the process to an arena where the science was peer-reviewed and restrictions on use would largely be matters for national governments, an arena where industry enjoys greater influence than at the international level.<sup>76</sup>

## **V. Conclusion**

Both the Chemicals and the Hazardous Waste Trade Regulations provide examples of very complicated, technical issues riven by uncertainty. They are also key areas of international concern because of the environmental potential for very visible environmental disasters (Bhopal, Seveso, and so on) and the economic/trade ramifications. While not all EU policy issues and sectors face the same mix of challenges, the cases nevertheless provide some instructive points on EU governance.

Who did the steering of policy in the two cases? In both instances we see a battle over political coordination and control. In the chemicals area, the EU constricted an expansive regulation to deal with the problem. However, third party countries managed to alter the implementation of this directive in certain key substances by moving the policy discussion to the UN arena. This in turn was a response in part to the forum shopping efforts of Swedish actors to secure the regulatory principles found in their own national legislation. In the hazardous waste area, there were technical difficulties of defining the nature of wastes, but for most of the time up to 1994, the Commission and the EU Council of Ministers were operating under the assumption that waste trade had economic (and environmental) merit. There was some disagreement with the approach (the Netherlands,

Denmark, certain members of the European Parliament, and ngos, most prominently Greenpeace), but the 84/6311 Directive and the 1994 Regulation represent efforts by the Commission and the majority of the member states to impose certain guiding principles. This effort to provide cohesion ran into problems because of the transnational dimension.

The most important element of this disruption was the efforts of certain member state governments seeking to promote the strictest possible regulatory principles. In the Chemicals case, Sweden sought to steer EU regulation by building up precedents in the other international fora. In the Basel Case, Denmark managed to shift the decision-making guidance over waste trade regulation to a forum where the Commission and EU Council viewpoint became a minority voice.

This reality presents a slightly different picture than that portrayed in some of the governance literature. Admittedly these governments would be relying on expertise in the public and private sector to inform their positions as can be seen in the Informal Working Group involve in the EU process. Nevertheless, the fact remains that, in terms of navigating the complex chains of international coordination, the governments of Sweden and Denmark took a leadership role. The key negotiating alliances that these governments formed to get their aims accepted do not meet the strict definition of a self-organizing network that provides its membership with rules and norms. For example, the Basel alliance was much looser. Indeed the activity of the pro-ban actors resembled steering through guerrilla warfare and political manipulation in order to isolate the EU position.

Technical networks did operate between the EU and the OECD - for example, exchanging information and regulatory ideas. Nevertheless, national governments, perhaps informed and influenced in their goals by networks, provided a great deal of the political thrust. One informal coordinating link, given procedural weight by the institutions of the Nordic

Council, gave both the Swedish and Danish governments a more efficient process for building support and cohesion.

The image of governance that the two cases present is that strict binding regulations and regulatory guidelines (which become stricter over time) are having an increasing importance in the international environmental sphere. They are increasingly critical in defining the moral/political issues of the environment and the shape of economic and trade activity in the contemporary world. In this context, knowledge and technical expertise is important. Part of the reason that the EU cannot ignore the activity occurring in other international fora is because the resources of the Commission and the Council are too limited to take a purely independent stance. The knowledge and experience of policy solutions creates an interdependent relationship between these different levels of government that other actors can exploit.

Although knowledge is important, the both cases warn against the expectation that technical argumentation will carry the day in all circumstances. Because the policy problems are so encompassing and complex, it is difficult for this knowledge to be centered within any one organization or state. Only the occasional policy or epistemic community might be able to provide this for an entire international debate, but these were not visibly shaping the politics of either two cases. This gives actors, who have the confidence and political skills to operate in the complex fora the opportunity to define the agenda out of all proportion to their relative level of knowledge. This was emphatically the case with Greenpeace, which managed to help swing the Basel debate around with a moral strategy, as opposed to one considering all the technical details. The EU actors seeking to plan the implementation of the chemical risk management regulation had to fall back on political judgment. Equally, the rationale behind the Canadian and Australian 'rescue' of copper and zinc clearly had little to do with technical, scientific reasons. In terms of the importance of different EU actors in this process, we see the continued important of national governments. In the two cases, Scandinavian countries helped take

the lead in steering EU policy towards new formulations. Part of the explanation for this high profile role is the strong environmental motivation of countries such as Sweden and Denmark. Beyond this environmental orientation is an explicit willingness to pursue gains in international fora, which is reflected in the attitude of the country representatives towards other issues. At the same time, the Nordic institutions and norms of cooperation intervene to facilitate coordination between the Scandinavian countries.

Although we emphasize the importance of national governments in the two cases, the two narratives raise provide two puzzles for the intergovernmentalist perspective. Contrary to intergovernmentalist expectations, the Council of Ministers has not been able to keep control of these processes and actually watched its carefully developed consensus erode in both cases. In this context, the Commission continues to have an important role in representing the EU and overseeing the policy guidelines that the EU regulations will follow. The cases show however the inability of the Commission to maintain control of these complex political interactions.

Such findings help to elaborate the notion of institutions in the EU context. A supranational body like the Commission and the European Parliament do take an active role in shaping the regulatory direction of the Community. The Council provides a defining context in which different territorial interests work out a consensus. Despite the relatively heavy institutionalization of this process in a policy sector such as the environment, the international dimension is creating new possibilities and permutations. In this reality, different sectoral actors have to be careful and observant. In the end, given the complexity of this international process, many interest groups will have to rely on the national politics to represent their interests. However, the two cases show that the influence of international fora may make this limitation problematic - national interests may be hijacked by other groups that can manipulate the system.

This uncertainty reflects the wider problems of steering and governance. In a policy area where it is often very difficult to anticipate the ramifications of the policy problem and the



alternative policy solutions, the process adds a whole new measure of complexity. The Commission in particular and the EU in general have tried to build a strong institutional role in environmental policy, but can fall prey to diversion. Other institutional arenas, such as the OECD and UNEP, and policy actors with the requisite technical knowledge or political skill, may take a hand in steering the EU on an altered course.

<sup>1</sup> See for example, Beate Kohler-Koch, 'Catching up with Change: the Transformation of Governance in the European Union,' *Journal of European Public Policy* 3 (1996): 359-380; Gary Marks, Liesbet Hooghe, and Kermit Blank, 'European Integration from the 1980s,' *Journal of Common Market Studies* 34 (1996): 341-378; Fritz W. Scharpf 'Introduction: the Problem-solving Capacity of Multi-level Governance,' *Journal of European Public Policy* 4 (1997) 520-538; David Vogel, 'Trading Up and Governing across: Transnational Governance and Environmental Protection,' *Journal of European Public Policy* 4 (1997): 556-71; Volker Eichner 'Effective European Problem-solving: Lessons from the Regulation of Occupational Safety and Environmental Protection' *Journal of European Public Policy* 4 (1997): 591-608.

<sup>2</sup> Guy Peters, 'Globalization and Governance', Paper presented at the Conference on 'The political Impacts of Globalization,' University of Birmingham, April 1997, p. 6; Jan Kooiman *et al.*, 'Findings, Speculations and Recommendations,' in Jan Kooiman (ed) *Modern Governance: New Government-Society Interactions*, London, Sage Publications, p. 257.

<sup>3</sup> Marks, Hooghe, and Blank, pp. 341-378; Markus Jachtenfuchs, 'Conceptualizing European Governance,' in Knud Erik Jørgensen (ed) *Reflective Approaches to European Governance*, Houndmills, Basingstoke, Macmillan, 1997, pp. 39-50.

<sup>4</sup> Peter Haas and Ernst Haas, 'Learning to Learn: Improving International Governance,' *Global Governance* 1 (1995), pp. 256-257.

<sup>5</sup> For example, Walter Kickert, 'Complexity, Governance and Dynamics: Conceptual Explorations of Public Network Management,' in Jan Kooiman (ed) *Modern Governance: New Government-Society Interactions*, London, Sage Publications, pp. 194-199.

<sup>6</sup> Kooiman *et al.*, pp. 252-255.

<sup>7</sup> R.A.W. Rhodes, 'The New Governance: Governing without Government,' *Political Studies* XLIV (1996): 652-667.

<sup>8</sup> Rhodes, pp. 658-661.

<sup>9</sup> Peters, pp. 22-23.

<sup>10</sup> Alberta Sbragia, 'The European Union as Coxswain: Governance by Steering,' paper presented at the Seminar on Theories of Governance, Gartocharn, Scotland, October 9-11, 1997.

<sup>11</sup> Andrew Jordan, 'Editorial Introduction: the Construction of a Multilevel Governance System,' *Environment and Planning C: Government and Policy* 17 (1999), p. 12.

<sup>12</sup> Albert Weale, 'Environmental Rules and Rule-making in the European Union,' *Journal of European Public Policy* 3 (1996), p. 598.

<sup>13</sup> Andrea Lenschow, 'Variation in EC Environmental Policy Integration: Agency Push within Complex Institutional Structures,' *Journal of European Integration Policy* 4 (1997): 109-127.

<sup>14</sup> Sbragia, p. 11.

<sup>15</sup> For examples, see Albrecht Funk and Alberta Sbragia (eds), 'Europeanization in International Perspective,' forthcoming.

<sup>16</sup> Robert Keohane and Joseph Nye, *Power and Interdependence*, 2<sup>nd</sup> ed, Glenview, Illinois: Scott, Foresman and Co, 1989; Helen Milner and Robert Keohane, 'Internationalization and Domestic Politics: an Introduction,' in Keohane and Milner (eds), *Internationalization and Domestic Politics*, Cambridge, Cambridge University Press, 1996, pp. 5-7.

<sup>17</sup> Giandomenico Majone, 'From the Positive to the Regulatory State: Causes and Consequences of Changes in the Modes of Governance,' *Journal of Public Policy* 17 (1997), pp. 146-149.

- <sup>18</sup> Konstantine Gatsios and Paul Seabright, 'Regulation in the European Community', *Oxford Review of Economic Policy* 5 (1989), pp. 42-49; James Caporaso, 'The European Union and Forms of State: Westphalian, Regulatory or Post-Modern?' *Journal of Common Market Studies* 34 (1996), p. 41.
- <sup>19</sup> Majone, p. 157.
- <sup>20</sup> Sbragia, pp. 23-5.
- <sup>21</sup> Claudio Radaelli, *Technocracy and EU Public Policy-making*, Longman, forthcoming, mimeo.
- <sup>22</sup> Anthony R. Zito, 'European Union Environmental Policy: in a Complex International Institutional Arena,' in Albrect Funk and Alberta Sbragia, *Europeanization in International Perspective*, forthcoming.
- <sup>23</sup> Weale, pp. 606-607.
- <sup>24</sup> Anthony R. Zito, *Creating Environmental Policy in the European Union*, Houndmills, Basingstoke, Macmillan, forthcoming.
- <sup>25</sup> George Tsebelis, *Nested Games*, Berkeley: University of California, 1990, pp. 1-20.
- <sup>26</sup> Geoffrey Dudley and Jeremy Richardson, 'Arenas without Rules and the Policy Change Process: Outsider Groups and British Roads Policy,' *Political Studies* XLVI (1998), pp. 731-732.
- <sup>27</sup> Gunnar P. Nielsson, 'The Parallel National Action Process: Scandanavian Experiences' in Paul Taylor and A.J.R. Groom, *International Organisation: A Conceptual Approach*, London, Frances Pinter, 1978; Aynsley Kellow *International Toxic Risk Management: Ideals, Interests and Implementation*. Cambridge, Cambridge University Press, 1999 (forthcoming); Anthony R. Zito 'Comparing Environmental Policy-making in Transnational Institutions', *Journal of European Public Policy* 5 (1998), p. 687; Robin Pistorius, 'Forum Shopping: Issue Linkages in the Genetic Resources Issue', in Robert V. Bartlett, Priya A. Kurian and Madhu Malik (eds) *International Organizations and Environmental Policy*. Westport, Greenwood Press, 1995.
- <sup>28</sup> Alberta Sbragia, 'Environmental Policy: The 'Push-Pull' of Policy-making' in Helen Wallace and William Wallace, *Policy-making in the European Union*, Oxford, Oxford University Press, 1996, p. 254; Wyn Grant, 'Transnational Companies and Environmental Policy Making: the Trend of Globalisation,' in J.D. Liefferink, P.D. Lowe, and A.P.J. Mol (eds) *European Integration and Environmental Policy*, London, Belhaven, 1993.
- <sup>29</sup> John McCormick, 'Environmental Policy: Deepen or Widen?' in P.H. Laurent and M. Maresceau (eds) *The State of the European Union Volume 4: Deepening and Widening*, Lynne Rienner, Boulder, CO, pp. 202-204; Mikael Skou Andersen, 'The Impact of New Member States on EU Environmental Policy,' *Environmental Politics* 5 (1996), 339-344.
- <sup>30</sup> Sbragia, 'Environmental Policy', p. 237-241. In using this perspective we fully accept the cautionary message about such categories, as articulated in Adrienne Héritier, Christoph Knill, and Susanne Mingers, *Ringing the Changes in Europe*, Berlin, De Gruyter, 1996.
- <sup>31</sup> McCormick, pp. 201-202.
- <sup>32</sup> Tony Brenton, *The Greening of Machiavelli: The Evolution of International Environmental Politics*. London, Earthscan, 1994, p. 169.
- <sup>33</sup> Nielsson, p. 305.
- <sup>34</sup> Erik Solem, *The Nordic Council and Scandinavian Integration*, New York, Praeger Publishers, 1977, pp. 36-53; Johnny Laursen, 'Nordic Ideas and Realities, Dynamics and Images of Nordic Cooperation,' in Knud Erik Jørgensen (ed) *Reflective Approaches to European Governance*, Houndmills, Basingstoke, Macmillan, 1997, pp. 146-163.
- <sup>35</sup> Marc A. Levy, 'European Acid Rain: The Power of Tote-Board Diplomacy' in Peter Haas, Robert Keohane and Marc A. Levy (eds) *Institutions for the Earth: Sources of Effective Environmental Protection*, Cambridge, Mass., MIT Press, 1993. See also: Sonia Boehmer-Christiansen and Jim Skea, *Acid Politics: Environmental and Energy Policies in Britain and Germany*, London, Belhaven Press, 1991; Cecilia Albin, 'Rethinking Justice and Fairness: The Case of Acid Rain Emission Reductions' *Review of International Studies* 21 (1995): 119-143.
- <sup>36</sup> Jean-Paul Hettelingh and Leen Hordijk, 'Environmental Conflicts: The Case of Acid Rain in Europe' *The Annals of Regional Science* 20 (3) 1986.
- <sup>37</sup> This methodology involved estimating how much pollution a particular ecosystem could take and tracing the damage back to the original source. See Keith R. Bull, 'An Introduction to Critical Loads' *Environmental Pollution* 77 (1992) pp. 173-176.

- <sup>38</sup> Zito, *Creating Environmental Policy*, pp. 66-78.
- <sup>39</sup> Zito, pp. 92-93.
- <sup>40</sup> R. Harrison and S. Mungall, 'Harmonisation', in Paul Taylor and A.J.R. Groom, *International Organisation: A Conceptual Approach*, London, Frances Pinter, 1978, pp. 189-190.
- <sup>41</sup> Zito, *Creating Environmental Policy*, forthcoming.
- <sup>42</sup> Brian Wynne, *Risk Management and Hazardous Waste: Implementation and the Dialectics of Credibility*, Berlin, Springer-Verlag, 1987; p. 26.
- <sup>43</sup> Marian A.L. Miller, *The Third World in Global Environmental Politics*, Boulder, Co, Lynne Reiner, 1995, p. 89.
- <sup>44</sup> Belgium and the Netherlands were the major destinations for German waste exports, although often this simply meant that waste was re-exported through ports such as Rotterdam.
- <sup>45</sup> Miller, *The Third World*, p. 90.
- <sup>46</sup> Miller, *The Third World*, p. 91.
- <sup>47</sup> Also of note is the 1991 Bamako Convention among African states. Miller, *The Third World*; p. 92.
- <sup>48</sup> Miller, *The Third World*; p. 93.
- <sup>49</sup> Zito, *Creating Environmental Policy*, forthcoming.
- <sup>50</sup> This may well be the first occasion on which the 'JUSCANZ' grouping (later to come to prominence at the Berlin Climate Change Conference) was active. This group acted as a regional political alliance, providing some cohesion and greater weight to the negotiating aims of the individual countries.
- <sup>51</sup> For example: 'Australia has proved it is totally isolated from the world community' (Sydney, 25 March, 1994); 'Canada takes isolated position at international environmental meeting' (Montreal, 23 March 1994).
- <sup>52</sup> Jim Puckett and Cathy Fogel, 'A Victory for Environment and Justice: The Basel Ban and How it Happened,' *Toxic Trade Update* 7.1 1994, pp. 2-7; p. 5.
- <sup>53</sup> Kellow, forthcoming.
- <sup>54</sup> Zito, *Creating Environmental Policy*, forthcoming.
- <sup>55</sup> Edwards. 'Dirty tricks' p. 13.
- <sup>56</sup> George Suter II, 'Uncertainty in Environmental Risk Assessment,' in L. Robert and A. Weale (eds) *Innovation and Environmental Risk*, London, pp. 203-230.
- <sup>57</sup> For a full description of the process to implement EC 793/93, see Patrick McCutcheon, 'Risk Management of Chemical Substances in the European Union' in Roland Bal and Willem Halffman (eds) *The Politics of Chemical Risk: Scenarios for a Regulatory Future*. Dordrecht, Kluwer, 1998. For useful background, see A.E. Bennett, 'The EEC Viewpoint of the Environment' in J.A.G. Drake (ed) *The Chemical Industry — Friend to the Environment*. Cambridge, Royal Society of Chemistry, 1992.
- <sup>58</sup> For a treatment of risk management which makes clear the need for economic concepts such as opportunity cost, see John D. Graham and Jennifer Kassalow Hartwell, 'The Risk Management Approach' in John D. Graham and Jennifer Kassalow Hartwell (eds) *The Greening of Industry: A Risk Management Approach*. Cambridge, Mass., Harvard University Press, 1997.
- <sup>59</sup> P.T.J. van der Zandt and C.J. van Leeuwen, *A Proposal for priority setting of existing chemical substances*, The Netherlands, Ministry of Housing, Physical Planning and Environment, September 1992, p. 3.
- <sup>60</sup> van der Zandt and van Leeuwen, p. 4.
- <sup>61</sup> van der Zandt and van Leeuwen, p. 9.
- <sup>62</sup> van der Zandt and van Leeuwen, p. 13.
- <sup>63</sup> Kristin Shrader-Frechette, 'Reductionist Approaches to Risk' in Deborah G. Mayo and Rachel D. Hollander (eds) *Acceptable Evidence: Science and Values in Risk Management*. New York, Oxford University Press, 1991.
- <sup>64</sup> See Claire Waterton and Brian Wynne, 'Building the European Union: Science and the Cultural Dimensions of Environmental Policy,' *Journal of European Public Policy* 3 (1996): 421-440.
- <sup>65</sup> McCutcheon, 'Risk Management of Chemical Substances'; p. 216.
- <sup>66</sup> See Kellow, forthcoming.
- <sup>67</sup> See Robert Nillson 'Integrating Sweden into the European Union' in Roland Bal and Willem Halffman (eds) *The Politics of Chemical Risk: Scenarios for a Regulatory Future*. Dordrecht, Kluwer, 1998.

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<sup>68</sup> Swedish National Chemicals Inspectorate and Swedish Environmental Protection Agency, *Risk Reduction of Chemicals*, KEMI Report No 1/91; p. 29.

<sup>69</sup> KEMI, *Risk Reduction of Chemicals*, p30.

<sup>70</sup> Swedish National Chemicals Inspectorate and Swedish Environmental Protection Agency, *Risk Reduction of Chemicals*, KEMI Report No 1/91, 1991.

<sup>71</sup> KEMI, *Risk Reduction of Chemicals*, p29.

<sup>72</sup> KEMI, *Risk Reduction of Chemicals*, pp. 29-30.

<sup>73</sup> KEMI, *Risk Reduction of Chemicals*, p31.

<sup>74</sup> KEMI, *Phasing Out Lead*, p12.

<sup>75</sup> Statement, Nordic Council of Ministers, Ministers of the Environment, Tromsø, 15 November 1994.

<sup>76</sup> See David L. Levy and Daniel Egan, 'Capital Contests: National and Transnational Channels of Corporate Influence on the Climate Change Negotiations' *Politics and Society* 26 (1998) 337-361.