EMISSIONS TRADING—A KYOTO NEPI: FROM EU RESISTANCE TO UNION INNOVATION

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“Emissions Trading—A Kyoto NEPI: 
From EU Resistance to Union Innovation”¹

I. INTRODUCTION

The 1997 Kyoto Protocol on Climate Change continues to be a target of pointed praise, condemnation and concentration from a variety of interests and actors in domestic and international environmental policy-making. As a result, the Kyoto Summit has been the subject of close scrutiny by a diverse group of scholars.² However, most of this literature overlooks interesting questions related to the political dynamics surrounding the emergence and implementation of a new environmental policy instrument (NEPI) at the international level—a greenhouse gas emissions trading system.³

While the eleven-day Kyoto Summit was an extremely well-attended international conference, it is particularly productive to analyze the negotiations in terms of the conflicting positions of two central actors, the European Union (EU) and the United States of America (US). Such an analysis generates two interesting questions related to NEPIs: 1) how and why is a new emissions trading system incorporated into an international environmental agreement, and 2) to what extent do post-conference, NEPI-adoption discussions reflect an ongoing process of policy innovation in the EU and US.

Investigating these questions may provide specific insights into the domestic politics and international negotiations that surround the complex adoption and implementation of similar NEPIs. To do so, the current study employs a detailed analysis of primary documents on EU and US climate change policies. Central to the analysis, two conflicting policy paradigms are identified: US free-market environmentalism and EU sustainable development through command-and-control regulation. These paradigms were transformed into non-negotiable positions at the Kyoto Summit: a US demand for an emissions trading system and EU calls for binding commitments and fixed timetables for emissions cuts.

¹ The authors would like to thank John Hoornbeek for useful comments on this draft.
The study explores reasons why the conflicting EU and US positions were overcome during the Kyoto negotiations and investigates the post-summit promotion of this NEPI by the formerly resistant EU. Following Kyoto, the adoption of an emissions trading system appears to have failed as an act of policy innovation in the US. However, while the EU initially opposed the inclusion of this particular NEPI in the final agreement, policy innovation remains underway in the Union. Considering the EU’s ability to compel Member States to adopt specific environmental policy instruments, the Kyoto protocol now appears to function as an external source of policy change.

The present study is organized in the following manner. The next section describes the actors at the Kyoto Summit, arguing for an analysis that focuses on the EU and US. The third section provides a brief empirical discussion of the emissions trading system. The fourth section elaborates the US position and the fifth section describes the EU position at the Kyoto Summit. These empirical sections identify the most central principles of each actor’s negotiating position. The sixth section engages the theoretical debate on the role of ideas in setting up national agendas and how these ideas were translated into non-negotiable positions at Kyoto. This section also discusses the importance of policy entrepreneurship as a means to achieving the final Protocol. The seventh section assesses the possibility that the EU has endorsed the emissions trading system due to a process of policy transfer. The final section summarizes the research findings and draws conclusions regarding the domestic and international origins of NEPIs.

II. THE KYOTO ACTORS

This section describes the various actors present at and deeply involved in the eleven-day Kyoto Summit. Because the conference promised an important culmination of international environmental policy-making, the sheer volume of actors becomes rather exhausting. Therefore, the section also posits an argument for focusing the analysis on two central actors at the Kyoto negotiations—the EU and US.

The Kyoto Summit was not only a high-profile international conference, it was also well-attended, well-publicized and well-contested. Indeed, the sensational

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3 For useful discussions of NEPIs in Europe, see Jordan et al. (2000) and Golub (1998).
atmosphere surrounding the Kyoto Summit arose from its potential as the “climax of ten years of international climate negotiations” (Starkey et al. 1999, 9). As an international conference, the Kyoto Summit was attended by 2,200 official delegates from 159 countries and commanded the attention of numerous other actors interested in the global environment. In total, almost 10,000 individuals attended the conference (Grubb et al. 1999, 61). Much of this attention was initiated and significantly amplified at the 1992 Earth Summit in Rio de Janeiro. The Rio Summit established a follow-up working group, the Conference of the Parties (COP). The COP’s first meeting, COP-1, was held in Berlin in 1995. A surprising result of COP-1 was the decision to support differentiated treatment for developed and developing countries in the solution of climate change problems. The next meeting, COP-2, was held in Geneva, Switzerland in 1996. The COP-3 meeting—the central issue of the current study—was held in Kyoto in December 1997.

In their analysis of the Kyoto negotiations, Starkey et al. (1998) provide a comprehensive inventory of the various actors involved. At this point of the current study, it is more important to identify the actors than to elaborate on the interests of each. According to Starkey et al., the Kyoto actors can be categorized as

1. EU
2. Non-EU, developed countries—Japan, US, Switzerland, Canada, Australia, Norway, New Zealand
3. Transitional economies—Central European countries and members of the former Soviet Union
4. Group of 77—China, India and over 130 other developing countries
5. Alliance of Small Island States (AOSIS)—42 mainly Caribbean and Pacific countries
6. Business and industrial groups
7. Environmental groups

For alternative inventories of the actors at Kyoto, see Schneider (1998) and Yamin (1998). Grubb et al. note a division that occurred in this group prior to Kyoto (evident at COP-1 in Berlin in 1995), particularly in regard to the OPEC states, small island states, low-lying states and states in danger of desertification (1999, 49).

It should be noted that the nuclear energy industry presented a very different position at Kyoto than this largely homogenous group. The divergent position of the nuclear energy industry likely arises from the potential benefits it would accrue from any agreement that limited greenhouse gas emissions, and consequently disadvantaged its competitors in the fossil fuel industries. For a discussion of the different interests in the “business community” present at Kyoto, see Dawson (1999). In particular, Dawson identifies “the insurance industry, shaken by the natural disasters which are predicted to become more frequent as climate change accelerates; the renewable energy technologies sector; and the natural gas industry, whose carbon dioxide emissions are only 60% those of coal. These industrial groupings have aligned themselves with those states that are exerting pressure for increasing the severity of emission reduction programmes in the industrial world” (1999, 170).
8. Scientific and technical groups
9. Individuals (1998, 10-12)

The preceding list provides a useful categorization of the various actors at Kyoto. However, the present study focuses the analysis on the EU and US, two central actors at the Kyoto Summit. By emphasizing the positions of only two actors, the current study does not intend, in any way, to discredit the influential role of the multitudinous other actors at the Summit. Rather, the prominence given to these two actors is done for analytical simplification—by analyzing the initial and post-negotiation positions of the EU and US, it becomes much clearer what changes, with regard to the emissions trading system, have occurred and why.

The EU and US are crucial actors on the international environmental scene. For example, as Grubb et al. argue, “the EU has been at the forefront of pressure for stronger action on climate change…[and] The United States occupies a pivotal role in the global negotiations on climate change, not just because of its sheer political and economic power, but because of the weight of its emissions which comprise almost 25% of the global total. An agreement without the United States would be meaningless” (1999, 30-31). The EU’s status as a committed proponent of resolving the climate change problem and the US’s status as a key to its resolution alone warrant the consideration of these two actors’ positions at the Kyoto Summit. When investigating the origins and significance of a NEPI that was initiated by the US and was strongly opposed by the EU, the focus on these two actors becomes even more evident.

As a regional integration organization, the EU’s position is a bit tricky to uncover. The EU was a signatory to the Protocol, but so too were its Member States because international environmental policy-making is an area of “mixed competence”. As Sbragia with Damro (1998) points out, the EU’s status as an international actor can become problematic in areas of mixed competence: in negotiations, the Commission speaks when areas under the EU’s exclusive competence are being considered, and the presidency speaks when

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7 This final category includes the Argentine Kyoto Chairman Raul Estrada-Oyuela and US Vice-President Albert Gore. For a useful discussion of Estrada-Oyuela’s influential role at the Kyoto Summit, see Grubb et al. (1999). For his part, Gore “directed international public attention to the talks and the importance of the topic at hand. His trip, his remarks, and his apparent blessing for U.S. acceptance of more substantial emissions cuts got the American delegation actually involved in bargaining and gave a much-needed boost to the process in Kyoto” (Starkey et al. 1998, 12).
the Council of Ministers speaks when areas of mixed competence are being addressed. The legal complexities of relations between the EU and Member States are extraordinary and lead to numerous questions on the part of third parties about which actor—the EU or each Member State—is responsible for implementing the agreements under negotiation. Undoubtedly, these considerations were in the minds of third parties when discussions at Kyoto turned to commitments. This complex arrangement of competency resulted in a certain degree of ambiguity over whether the EU individually or the Member States jointly would be responsible for meeting the Kyoto emissions targets. The ambiguity, which generated a so-called EU bubble, “earned the EU almost universal hostility from the rest of the OECD…” (Grubb et al. 1999, 86). However, the EU’s position at the Summit is rather more easily determined because of the pre-Kyoto negotiating position agreed by the Member States. While the EU Presidency and the Member States played active roles at the Summit, their positions reflected the guidelines previously decided by the Council of Ministers, via a detailed “burden-sharing” agreement. This negotiating position, which is further discussed below, was the basis of the Union’s activities at Kyoto.

As a single nation-state, the US position is relatively straightforward for analytical purposes. A federal system, the US is often considered a unitary actor in the international relations literature. However, it should be noted

There are also big structural divisions in the US political system. In particular, the US administration conducts international negotiations, and is more exposed to international realities than the domestic legislature… whatever the administration agrees internationally has to be ratified by the legislature if it is to have any legal force, and the Congressional system in particular is heavily influenced by the interests of coal-producing states and oil and electricity companies. Congress thus exercises a virtual

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8 As Macrory and Hession argue:
In the absence of a clearly defined area of exclusive Community competence for climate change and the absence of a clear obligation detailing specific action it is extremely difficult to isolate Community and Member-State obligations. In particular it remains unclear whether the central commitment of the Member States and the Community under the Convention to aim at stabilization of greenhouse gas emissions at 1990 levels for the year 2000 applies to each Member State individually or to the Community jointly. The former interpretation is one the poorer Member States will find difficult to accept (1996, 114).

9 For discussions that clarify the evolution of the EU’s negotiating capacity at international environmental conferences, see Sbragia with Damro (1999), Jupille and Caporaso (1998).

10 Most of the information on these activities has been drawn from the Kyoto Daily reports in the Earth Negotiations Bulletin, published by the Institute of Sustainable Development.
stranglehold on what can be implemented—and the administration has continued to negotiate with this in mind (Grubb et al. 1999, 32).

In addition to this difficult relationship with the legislative branch, the US administration’s large delegation to Kyoto included a complicated array of individuals from various executive branch offices. In addition to a Senior Negotiating Team and a White House Team, the delegation included representatives from the Departments of State, Energy, Agriculture, Defense, Treasury, Justice, and Labor, as well as from the Environmental Protection Agency, the US Agency for International Development and the NOAA. The potential for divisions among these various actors in the US delegation became apparent following the COP-2 when “…the Environmental Protection agency and the State Department argued or stronger action while the Departments of Energy and of Commerce took the opposite view; the Department of Defense also joined the fray, worried about the possible impact of emission constraints on its military operation” (Grubb et al. 1999, 59). Given these complexities of the US positions, it is still useful to analyze the US as a unitary actor at the negotiations in order to simplify its interaction with the EU.

The different positions of the EU and US will be elaborated further in sections three and four. As will be noted, these two actors displayed considerable differences in their basic approaches at the Kyoto Summit. These different positions reflect different core principles. For example, “In contrast to Europe, the United States has tended to be more hesitant about responses to the climate change issue overall and far more concerned about the economic consequences of CO₂ abatement” (Grubb et al. 1999, 31). While there are a number of other differences between the overall EU and US positions at the climate change conference, the next section provides a brief empirical clarification of the Kyoto NEPI—an emissions trading system.

III. A KYOTO NEPI: THE EMISSIONS TRADING SYSTEM

At the Kyoto Summit, the emissions trading system was significantly encouraged by the US’s “very positive experience with permit trading in the acid rain program, [which reduced] costs by 50 percent from what was expected, yet fully serving our
environmental goals” (Eizenstat 1998, 4). As such, the mechanism in the Kyoto Protocol resembles the American “pollution permits” scheme for reducing domestic sulfur dioxide and lead output (Banks 2000, 488). More specifically, according to Johnston (1998), tradable permits resemble the system developed in the US Clean Air Act Amendments of 1990, the Southern California Air Quality Management District’s Regional Clean Air Incentives Market (RECLAIM) and the South Coast Air Basin (SCAB).

The idea of an emissions trading system is a new and innovative way—based on domestic US experience—in which to tackle the problem of climate change; in short, a NEPI. Interestingly, this domestically tested NEPI is now being initiated at the international level, via Article 17 of the Kyoto Protocol. Dobes provides a useful general description of the mechanics behind this NEPI:

Tradable permits are a well-established concept, both in the theoretical literature and in practice. In the case of emissions they represent a right granted by a government to the permit holder to emit a specified quantity of gases. By issuing only a limited number of permits governments can control the total quantity of gas emitted, on a local, national or international level. Because permits are usually limited to a quantity that is less than the amount of gas that would normally be emitted, the right to emit becomes a valuable commodity. If trading of permits is allowed, then a market price will be established. Those wishing to emit the specified gases beyond permitted levels must either reduce their emissions or purchase permits to emit. Polluters able to reduce their emissions relatively cheaply will do so, rather than purchase permits. Those polluters who face higher abatement costs will tend to buy permits to satisfy government requirements. In this way, reductions in emissions are made by those polluters who can do so at least cost, being compensated by polluters who face higher costs of abatement (1999, 81-82).

As Dobes clarifies, the basics of tradable permits are well-considered and well-established. But, the actual incorporation of this NEPI into the Kyoto Protocol required

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11 The US Environment Protection Agency supports this contention (USEPA 1997).
12 Banks discusses the history of the tradable permit system: “About 30 years ago, J. H. Dales (1968) launched the hypothesis that markets could handle the pollution problem, and now this brazen misconception has been hauled into a major international forum. Going a step further, Montgomery (1972) appeared to have proved that the market could lead to a set of efficient prices for pollution, but unluckily it was the kind of proof without interest outside the seminar room, since it is completely without relevance to the real world” (2000, 487).
13 In the context of international environmental negations, the US initially floated the proposal for an emissions trading system at the 1996 COP-2 conference in Geneva (Grubb et al. 1999, 90-91).
more particularized arguments that addressed moving the system from a domestic context to the international level. Moomaw et al. elaborate such arguments:

International emissions trading represents a new opportunity to reconcile the equity and efficiency concerns of the parties under the Kyoto Protocol… The regime for such trading remains to be determined… Tradable permits are seen as a more flexible means of achieving emissions targets because they will allow firms or nations to keep down the costs of reducing greenhouse gases. To meet the emissions reductions set out by the protocol, this cost reduction can occur when a firm or nation that finds it comparatively easy to reduce greenhouse gases can sell emissions permits to a firm or nation who finds it more expensive to reduce greenhouse gases—thus lowering the costs without affecting the level of environmental protection or reducing more greenhouse gases for the same cost (1999, 85-86).

While a number of concerns surrounded the establishment of an emissions trading system at the international level, proponents of the system convincingly argued for the NEPI. Indeed, “…concerns that such a system was not practical, that there was not enough time to set it up, or that administrative requirements would be too onerous, proved hard to sustain” (Grubb et al. 1999, 92). Nevertheless, the substantial uncertainty and complexity of an international emissions trading system reflects its relative newness as an innovative policy instrument and prefigures the subsequent skepticism and outright resistance encountered at Kyoto. The next two sections of the study elaborate the US and EU positions on this emissions trading system.

IV. THE US POSITION AT KYOTO: FREE MARKET ENVIRONMENTALISM

This section describes the US position at the actual Kyoto negotiations. Considerable attention is directed toward the central issue of the current study, the idea of an international emissions trading system. A crucial insight of the following discussion is the pervasiveness of the dominant US policy paradigm at Kyoto, faith in market-based solutions to the problem of climate change.14

The general foundations of the pre-Kyoto US negotiating position can be found in the Clinton Administration’s climate change proposal.15 This White House document

14 Policy paradigms following the concept proposed by Hall (1993).
15 Prior to Kyoto, the US issued its position at COP-1 (Berlin 1995). However, due to an election in 1996, much attention following this conference was directed toward other issues. Thus, following COP-2, “The
offered five priorities that form the basis of the US’s domestic and international climate change strategy:

- Multi-year binding targets to reach 1990 emissions levels by 2008-2012 and reductions below 1990 levels in the five-year period that follows,
- $5 billion program of tax cuts and R&D for new technologies,
- Industry-by-industry consultations and early credit,
- Developing countries must participate, and
- Broad-based domestic and international emissions trading system begins after a decade of experience has accumulated (White House 1997, 1).

Only the final two priorities of the Clinton Administration directly address the international obligations and strategies of the US with regard to climate change. However, most notable across the priorities is the general emphasis on market-based solutions to the problem of climate change. In particular, the mention of the emissions trading system in the final priority is instructive of the US approach to the Kyoto NEPI.

Prior to Kyoto, the US Government announced its position on some of the most contentious issues relating to climate change via the Climate Action Report (1995). This report was issued by the State Department, signaling its determination to pursue market-based solutions to climate change. Indeed, as Campbell (1998) argues:

By its own admission, the US Government is focusing the majority of its efforts on market incentives and voluntarism, with a lesser emphasis on regulation and R&D. A review of the report leaves the reader with the clear sense that voluntarism is the preferred option for reducing... emissions in the US. Numerous references are made to the outstanding industry response to voluntary programmes, and their superiority over mandatory programmes, which are considered more time consuming to enact and are subject to limited compliance. In the context of climate change, two regulatory shifts in environmental policy are emphasised: first, that from end-of-pipe regulation to pollution prevention through voluntary agreements, particularly in the area of energy efficiency; second, from command and control methods to tradable emissions permits notably through the Clean Air Act amendments of 1990 (1998, 162).

The focus of the US negotiating position—before, during and after Kyoto—on market-based mechanisms was strongly supported by the business community.¹⁶ Such

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¹⁶ The International Chamber of Commerce’s statement on Kyoto reflects this faith in market-based environmentalism:
support is not particularly surprising given that NEPIs relying on market-based mechanisms typically reflect and encourage very strong incentives for business actors. Enhancing the pursuit of profit, a market-based mechanism is preferable to the business community because it “creates a tradable asset: the permit or allowance… [whereas a tax] extracts revenue from the firm without adding any compensating value” (Grubb et al. 1999, 90). In other words, the regulatory flexibility inherent in the Kyoto NEPI could replace environmental taxation with greater corporate control over the pursuit of profit.

The US position at Kyoto was built on three separate but consistent objectives. From these objectives, the concrete proposal for an emissions trading system followed. The notion of free market environmentalism was clearly a central and guiding component (i.e., core principle) of the overall US strategy prior to Kyoto. Speaking before the US Senate Foreign Relations Committee, the head of the US delegation to Kyoto, Stuart Eizenstat (Under Secretary of State for Economic, Business and Agricultural Affairs) outlined the three objectives guiding the US position.

The first US objective was to attain “realistic targets and timetables for reducing greenhouse gas emissions among the world’s major industrial nations” (Eizenstat 1998, 3). By “realistic,” the US negotiators meant a flexible, multi-year time frame instead of a fixed, single-year target. The perceived benefit of such an approach was that it would allow the averaging of emissions reductions over five years. Such flexibility, it was argued, would lower public and private costs and “smooth out the effects of short-term events such as fluctuations in the business cycle and energy demand, or hard winters and hot summers that would increase energy use and emissions” (Eizenstat 1998, 3).  

For more on the business perspective on the Kyoto Protocol, see Carr and Thomas (1998).

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17 EU support for binding commitments to emission targets was evident prior to 1992 Rio Summit, at which the United Nation’s Framework Convention on Climate Change (UNFCCC) was signed. “However American opposition, in an election year, led to the negotiation of a much weaker Article 4 of the UNFCCC, which merely expressed the ‘aim (for Western industrialized countries) of returning individually
The second US objective was to initiate flexible, market-based mechanisms for achieving the agreed upon targets. This objective provides the basis for the US promotion of the emissions trading NEPI. The objective also stands in sharp contrast to other more rigid and mandatory measures supported by the EU and other countries, such as carbon taxes. The central component of this objective was the introduction of an emissions trading system, which was viewed as a cost-effective, market-based incentive to attain the maximum level of emissions reductions. Eizenstat declared the ultimate inclusion of the emissions trading system a “major victory for us,” because “The commitment we made in Kyoto would not have been made—could not have been made—were it not for the flexibility mechanisms that were also agreed there” (1998, 4). Thus, the concept of flexible, market-based solutions was a core principle of the US negotiating position. Without it, support from important congressional and business interests would have been lost. As discussed below, even with the inclusion of the emissions trading system, the Clinton Administration still faced the daunting task of gaining the necessary Senate support for the Protocol and the difficult negotiations on the specific rules and procedures that would govern the new mechanism.

The last US objective was to require meaningful participation in emission reductions by developing countries. This objective was strengthened by the pressure of the US Senate’s Byrd-Hagel Resolution, which passed in the summer prior to the Kyoto Summit by an impressive margin of 95 to 0. While Byrd-Hagel was a non-binding resolution, it did indicate the Senate’s strong apprehension over the Kyoto negotiations and announced the Senate’s intent not to ratify any agreement that lacked commitments to reduce greenhouse gases by developing countries. A primary concern of Byrd-Hagel was the perception that an agreement at a UN-sponsored conference would undermine US sovereignty and require inequitable US emission reductions, which might jeopardize US military capabilities. While the US acknowledged that industrialized countries accounted for 70 percent of greenhouse gases, the objective grew out of concerns over future sources of greenhouse gases. According to Eizenstat, “by around 2015 China will

or jointly to their 1990 levels of... emissions of carbon dioxide and other greenhouse gases’” (Brethernton and Vogler 1999, 103).
be the largest overall emitter of greenhouse gases, and by 2025 the developing world will emit more greenhouse gases in total than the developed world” (1998, 4).

While Eizenstat argued that the US negotiating team achieved the first two objectives, the third was viewed as a continuing aim of post-Kyoto negotiations. Indeed, Eizenstat admitted as much before the US Senate Foreign Relations Committee, when he simply stated “The Kyoto agreement does not meet our requirements for developing country participation” (1998, 5). The US negotiating team did attempt to rectify this apparent shortfall by supporting a Brazilian proposal for a Clean Development Mechanism (CDM). The CDM reflects the US-backed concept of “joint implementation” coupled with the principles of free-market environmentalism. Briefly, the CDM allows “companies in the developed world to invest in projects in countries in the developing world—such as the construction of high-tech, environmentally sound power plants… The companies in the developed world will get emission credits at lower costs than they could achieve at home, while countries in the developing world will share in those credits, and receive the kind of technology that can allow them to grow without ruining their environment” (Eizenstat 1998, 5). Nevertheless, even with the CDM, the failure to attain the third objective in the Kyoto Protocol—meaningful participation in emission reductions by developing countries—would prove a critical element in the US Senate’s failure to ratify the Protocol.

After the final text of the Protocol was agreed in Kyoto on December 11, 1997, the agreement still faced the challenges of ratification. Most important among these obstacles to ratification was the US Senate, which will be discussed briefly below. The US position at Kyoto, especially regarding the NEPI of an emissions trading system, largely hinged on the broader faith in market-based solutions. This faith is reflected in the three central US’s objectives at Kyoto. The attainment of these objectives would encounter strong resistance at the Summit, especially from the EU, which put its broader faith in regulatory solutions designed to ensure sustainable development.

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18 For more on the CDM, see Parson and Fisher-Vanden (1999), Werksman (1998). The CDM is often referred to as “the Kyoto Surprise” because it was not included in the pre-Summit negotiating text.
V. THE EU POSITION AT KYOTO: COORDINATED AND MIXED SUPRANATIONAL RESISTANCE

This section identifies the basic EU position at Kyoto, a position that was gradual and complex in its development. Particular attention is given to the EU’s position on the Kyoto NEPI. A crucial insight of the following discussion is the pervasiveness of the dominant EU policy paradigm at Kyoto, a determination to link sustainable development with any solutions to the problem of climate change.

Here it is useful to define the EU’s policy paradigm of “sustainable development through command-and-control regulation”, which encompasses the common characteristics of the EU approach towards environmental policy. As is widely known, Article 2 of the Treaty of European Union and the 5th Environmental Action Program (EAP) commit the EU to promote throughout the Union a harmonious and balanced expansion of economic activities and “…sustainable non-inflationary growth respecting the environment.” This statement summarizes the traditional way in which the EU has tackled environmental issues since the 1970s. EU policing within this area was developed under the assumption that a totally free market misallocates natural resources and produces inadequate incentives to prevent environmental degradation (Golub 1998, 8). Within the context of avoiding market failures, EU environmental goals have been inspired by prevention rather than curing, rectification of problems “at the source” and the polluter-pays principle. Thus, the EU’s promotion of sustainable development is one reliant upon regulatory approaches that sustain the environment without harming economic competitiveness.

How then could the EU deal with these problems and overall goals of sustainable development without damaging the economic competitiveness of the actors involved? The EU has largely developed its environmental policy on the basis of regulation, not only addressing product but also process regulation (Majone 1996a, 58), where climate change policies might be included. By imposing uniform and detailed directives within the EU (so-called command-and-control instruments), both the Members States and the Commission overcame environmental dumping and the commensurate economic disadvantages. They also overcame the transaction costs associated with settling

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19 These principles were first recognized at the 4th EAP.
environmental issues as an international market failure (Majone 1996a, 69-71), mainly: gathering information, bargaining, and especially the credibility problems attached to policing at the national level.

The EU position that developed out of its policy paradigm was to defend both its bubble concept (a mechanism of shared responsibility within the Union) and pursue common and coordinated policies and measures as the main mechanisms to cut EU emissions. The EU also had a clear preference for mandatory emissions cuts in all Annex I countries.\(^{20}\) In order to understand the EU’s position, it is critical to focus attention on the actors that defined the EU position and their basic goals before the Kyoto negotiations.

The routes to power within the EU policy system are often informal and based on negotiated and consensual agreements. In most formal procedures, as in decisions or initiated EU legislation, proposals have to be prepared by the European Commission. However, when no formal legislation is involved, the Council of Minister may turn to formats that do not need to be formally initiated by the Commission. This is the case of climate change policy, in which the Council’s influence in these cases was conditional upon the strength of the country holding the presidency (Nolin 1999).

EU climate change policy was initiated in 1988, and immediately gained momentum in 1990, the first time the EU committed to reduce CO\(_2\) emissions by the year 2000 at 1990 levels.\(^{21}\) How to share the responsibility for the reduction was also an early issue, put forward by the Cohesion countries—Spain, Portugal, Greece and Ireland (Haigh, 1996).

In spite of the pressure imposed by the Berlin mandate (1995), the question of “who should do what?” remained unanswered through 1996.\(^{22}\) The Irish and Italian presidencies attempted to choose targets for negotiation without discussing target

\(^{20}\) The Annex I countries appear in the first annex to the Kyoto Protocol. These countries have agreed to stabilize emission reductions by 2000 to 1990 levels. Included in Annex I are most OECD members, the Eastern European countries, Ukraine and Russia.

\(^{21}\) Joint Council of Energy and Environment Ministers, October 1990.

\(^{22}\) COP-1 of UNFCCC decided that Annex I countries should establish quantified limitation and reduction objectives (QELROS) with specified time frameworks, which should be contained in a protocol or another legal instrument to be negotiated in two and a half years. This is basically the content of the Berlin Mandate, encouraged by the AOSIS countries and Germany in COP-1 of UNFCCC.
sharing. This position upset the Cohesion countries, which did not want to commit to specific objectives because of the fear that such targets would restrict the expansion of their economies. The first proposal on how to share emission reductions came from DGXI in the form of a “non-paper”, which failed to acquire the necessary sponsorship and lost much of its credibility.

Nolin argues that the adoption of the EC bubble as the EU climate change policy goal owes a great debt to the Dutch presidency (1999, 178). Cognitive resources held by the Netherlands at the time of its presidency played a key factor in explaining the Dutch role as promoter. The Dutch presidency took advantage of the interactive knowledge gathered since 1995 about each Member States’ objectives regarding CO₂ emissions. They were also aware of the special treatment being demanded by the Cohesion countries and the emission drops being experienced by the UK and Germany, due to factors such as economic restructuring in new German Länder and moderate UK economic growth rates in the 1990s. In addition, the Dutch presidency had to consider the impact of Member States switching from petroleum to natural gas and new national policies in the energy and industrial sectors.

The Dutch presidency expanded its own scientific resources by enhancing close links between the Dutch Ministry of Housing, Spatial Planning and Environment and academic and other non-governmental experts. This array of cognitive resources gave a definitive boost to the bubble proposal, which distributed the level of emissions reductions/increases by sectoral and national criteria, the so-called “Tryptic approach”. The commitment for each Member State was adopted in the Environment Council of Ministers of March 1997, and initially stated as a 15% reduction. The Member States’ burdens can be checked in Table 1, at the end of this document.

Different reasons, though, explain the clear preference of the EU for common and coordinated policies and measures (CCPM). CCPM refers to actions at the Community level that are adopted by all Member States usually in the form of a Directive or other legal measure. CCPM are actions that produce value added to national measures when these are coordinated at the EU level. EU climate change policy until 1997 was based

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23 Italy held the presidency during the first half of 1996, and was followed by Ireland, the Netherlands, Luxembourg (during Kyoto negotiations) and the United Kingdom.
upon technical standards (such as Best Available Technology—BAT), regulatory emissions limitations, and only more recently on new environmental instruments such as environmental agreements and eco-schemes (EMAS), as shown in Table 2 at the end of this document. CCPM can be viewed as an encompassing chain of policy instruments aimed at reducing air emissions, whether through air quality standards or emissions limits, as stated in the IPPC Directive.\(^{24}\)

Although the Commission recognized the inadequacy of regulatory instruments to deal with the emissions problem, the EU’s strategy was heavily dependent upon traditional environmental instruments, very much based on command-and-control strategies, adopted before 1997. This heavy reliance on regulatory instruments imposed sunk costs and increased returns on the EU climate change policies (Pierson 1996, 2000). These sunk costs made the EU resistant to the introduction of a new environmental policy instrument, such as the proposed Kyoto emissions trading system.

The final EU position prior to the Kyoto summit is unambiguously stated in the *Commission Communication on Climate change: EU strategy towards Kyoto conference*.\(^{25}\) The Commission, in its communication to the European Parliament and the Council of Ministers, recognized that it only would be possible to reverse the tendency on emissions if Parties assumed a shared responsibility and comparable compromises. This is reflected in a proposal for a 15% reduction for the EU below levels of 1990 by 2010 on a basket of three gases—CO\(_2\), N\(_2\)O and CH\(_4\). Such reductions were targeted for all industrialized states:

…it only would be possible to reverse the emission trends in the framework in a global regime of shared responsibility and comparable commitments. The EU position… is based upon the supposition that all the industrialized countries must and can act in the same way\(^ {26} \) …The impact on international competitiveness in certain sectors would be substantial if the rest of the industrialized countries do not assume comparable commitments.\(^ {27} \)

\(^{24}\) Directive 96/61/EC, on *Integrated Pollution Prevention and Control*. The IPPC Directive does not deal with diffuse emissions sources such as the transport, tertiary, household and agriculture sectors. Nonetheless, the investment programs that steered EU climate change policies sought to encourage the use of new technologies for the sake of eventual emissions reductions. That is the case of the ALTENER, SAVE, THERMIE or the Fifth Framework Program for Research and Technological Development.

\(^{25}\) COM (97) 481 final

\(^{26}\) Ibid: 20.

\(^{27}\) Ibid: 18.
Moreover, reduction targets would have to be accompanied by common and coordinated policies and measures for achieving the fixed objectives. This position was based on the assumption that world-wide coordination of policies and measures would facilitate the implementation of cost-effective policy instruments and would also diminish political resistance by spreading a sense of symmetry in the implementation of the Protocol.

In short, the EU’s position at Kyoto turned on four interrelated components:

- **Binding and differentiated targets**: The EU was firmly determined to defend legally binding flat emission reductions (QELROS) for Annex I countries. However, the EU statement was blurred, or at least revealed some ill-defined features, mainly affecting the question of whether QELROS for third parties should be defined in terms of flat fares or differentiated emission cuts. The lack of definition of the EU position towards third parties was worsened by the fact that the EU did not reveal how the “burden sharing” was to be distributed among Member States, and who would be responsible for implementing emission cuts.29

- **Fixed timetables**: Along with the G-77, the EU initially proposed a fixed date for emissions reductions. In fact, the EU arrived at the Summit committing itself to achieve a reduction of 15% on three gases by 2010. This position contradicted the “emission budget” approach defended by other parties, mainly the US, which upheld a multi-year target approach to progressively achieve reduction commitments.30

- **Common and coordinated policies and measures (CCPM)**: The pursuit of binding CCPM was a key part of the EU’s negotiating strategy, even when no other party supported it. The proposal included mandatory common policies and measures within the Union, some of which were to be given high priority and included in national programs, especially in the fields of energy and transportation. It is important to note, once again, that the proposal reflects the regulatory approach familiar to EU environmental policy, as it would suppose the adoption of binding targets and a uniform way to reach them.31

- **Flexible mechanisms**: The EU position towards flexible mechanisms and, therefore, NEPI’s, can only be analyzed through the interactions developed

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28 Quantified emissions limitations and reduction objectives.
30 The US mainly defended multi-year targets because the “emission budget” concept initially implied both the specification of the total emission permission for each country as a whole, and how it should be distributed into time limits.
31 COM (97) 481 final (11) says that “(...) an overall strategy demands the application of a broad range of policies and measures and, among them, the traditional regulatory measures will have an important role”.
during the different meetings at Kyoto. Although the EU was supportive of flexible mechanisms, especially those linked to voluntary agreements (which were already carried out in the EU\textsuperscript{32}), EU representatives were wary of the multiple loopholes linked to them, which could render compromises meaningless. This is why joint implementation (JI) and emissions trading systems were always linked to the acceptance of binding targets and fixed timetables, and required to be complementary to measures already taken at the national level.

Thus, the EU’s position at Kyoto focused on four central components. Most crucial for the current study was the EU’s desire for binding targets and fixed timetables for emissions reduction. This position encountered strong opposition from the US and other countries determined to promote the more flexible, market-based mechanism of an emissions trading system. Nevertheless, the EU firmly defended its position, largely due to its principled belief in sustainable development through regulation. This belief would create further gridlock at the actual Kyoto Summit because it was inherently reluctant to accept an emissions trading system. Indeed, prior to the Summit, the Council of Ministers and the Dutch Presidency crafted a compromise between the majority of governments that remained hostile to emissions trading and the small band of supporters. ‘The Council considers’, they concluded, ‘that mechanisms such as emissions trading are supplementary to domestic action and common coordinated policies and measures, and that the inclusion of any trading system in the Protocol and the level of the targets to be achieved are interdependent. It therefore calls upon all industrialized countries to indicate the targets they envisage for 2005 and 2010’ (Grubb et al. 1999, 94).

The next section discusses the actual negotiations at the Kyoto Summit. Particular attention is given to explaining the compromise ultimately achieved at Kyoto. Thus, the battle lines were drawn at Kyoto, especially in regards to the opposing EU and US positions. For the EU, a final agreement at Kyoto would only be acceptable if it included assurances for sustainable development through regulation. This emphasis on sustainable development generated a position reliant on regulatory approaches to binding targets, \textsuperscript{32} The European Commission has developed a set of guidelines to ensure the proper use and transparency of environmental agreements. The Commission makes a number of recommendations with regard to development and implementation of voluntary agreements, which call for more rigor and accountability in the implementation of such agreements. For more details, see COM (96) 561 final.
fixed timetables and CCPM. The same emphasis created skepticism toward new flexible mechanisms, in particular the market-based emissions trading system of the US.

VI. EXPLAINING THE NEPI NEGOTIATIONS

This section focuses on the negotiations at Kyoto. The central question is “How and why was a new emissions trading system incorporated into an international environmental agreement?” As such, the section investigates the sources of compromise between the different EU and US positions, one rooted in free market solutions and the other rooted in command-and-control regulatory solutions. The inclusion of the emissions trading system was also the result of an instrumental role by Chairman Raul Estrada-Oyuela. From a public policy perspective, it seems that the final agreement at Kyoto was greatly indebted to the role developed by the Chairman. Mr. Estrada—firstly chair of the Ad-hoc Group on the Berlin Mandate (AGBM) and, then, chair of the Committee of the Whole at Kyoto—demonstrated an effective capacity to send signals and conciliate parties’ positions that initially appeared to be incompatible.

The emissions trading system in the final Kyoto Protocol was largely initiated on the insistence of the US. Grubb et al. offer a useful summary of the emergence of emissions trading and the general contours of the battle lines that were drawn at the Summit: “The primary incentive for the United States is that trading provides perhaps the only means by which it can agree to substantial flat-rate emission reductions. It was obvious that the US Congress would never agree to bind the country to significant cuts in its domestic emissions, and it was equally obvious that the EU would place intense pressure for such cuts on the United States and the rest of the OECD” (1999, 93).

For its part, some of the proposals initially defended by the EU were immediately contended after the negotiations started. In fact, the EU and its Member States may have been a bit surprised at Kyoto because “…the EU had spent so much time and effort agreeing its text internally that its negotiators were largely unprepared for the degree of opposition they encountered in the wider forum of the AGBM” (Grubb et al. 1999, 68).

Particular opposition arose when Canada and the US questioned the EU bubble, by which the EU committed to jointly reduce its emissions by 15% below 1990 levels by 2010. The EU argued in favor of new “equitable” commitments by the developing
countries, and the adoption of tough restrictions in developed countries.\textsuperscript{33} Canada questioned the EU bubble on the basis that it was not clear that this approach would be equitable, as it allows for wide differentiation within the EU, while denying differentiation between other parties to the agreement.\textsuperscript{34} Moreover, it was not clear to what extent the EU would be able to achieve its commitment after Union enlargement.

The EU moved towards a position of “comparable commitments” among major economies after being criticized by Canada and its concept of “equivalence of efforts”. The EU was the most vocal party in noticing the loophole that could derive from stretching flexibility in QELROS too far. Thus, they proposed the creation of “burden sharing groups” such as the EU, to achieve credible cut commitments. However, it was not clear what type of flexibility might prevail in achieving its commitment jointly through the EU bubble, a concept under criticism by almost all parties involved in the negotiations.

The question of QELROS ended up in serious gridlock on the last day of negotiations. The EU—with some non-Annex I countries, mainly China and the G-77—was clearly against an offshore extraterritorial implementation of targets, claiming QELROS as a \textit{sine qua non} condition for reaching any type of agreement. On the other side of the coin, this tough stance cannot be understood without making reference to the non-negotiable proposal of the other powerful party, the US. The EU constantly expressed its lack of confidence towards flexible mechanisms, but especially towards the US’s proposal for an emissions trading system.

The EU was facing a clear disadvantage, as its own system was completely unfamiliar with this type of NEPI. In addition, the EU’s heavy dependence on regulatory instruments imposed sunk costs on its climate change policies and served to solidify opposition to the NEPI. Moreover, it argued that the acceptance of the NEPI without binding QELROS would encourage the practical non-commitment of some developed

\textsuperscript{33} This position was greeted with skepticism due to historical economic differences among European and non-European countries: “Emissions have been rising relatively slowly in the EU because of the collapse of coal-mining in Britain and the rundown of the smokestack industry in east Germany. The EU was also against the trading of pollution credits because such measures diluted its own unique advantage. Having enjoyed nothing like America’s heady economic growth since 1990, and being less reliant on coal, making cutbacks in emission levels was always going to be easier for the Europeans” (Economist 1997).

\textsuperscript{34} For instance, the EU demanded a 6% reduction form Japan when, in fact, its energy was already one of the most energy-efficient.
countries. For example, the US could achieve its obligations through buying permits/credits from other countries. In the corridors, suspicion emerged that the US was negotiating with Russia in order to purchase permits. In its proposal, however, the US was supported by Switzerland, Canada, Australia, Norway and New Zealand.

Despite these concerns, the EU moderated its position on the Kyoto NEPI. While the EU emphasized a regulatory approach, as long as the Union lacked competence in crucial areas of fiscal and energy policies, concerns remained about its ability to promote emissions cuts through fiscal measures. In addition, the 5th EAP had already recognized the limitations of a purely regulatory approach to tackle the climate change problem and that a broader range of instruments was required for emissions reductions.

Toward the end of the negotiations in the Committee of the Whole, the US linked its emissions cuts with the existence of a trading system, which might start to work just after the Kyoto Summit. For its part, the EU pointed out that the scope of flexibility, whether on targets, timetables or the use of market-based instruments was contingent upon QELROS numbers.

A. Policy Change at Kyoto: the Power of Policy Paradigms

The current study uncovers insights into the broader category of policy change, as defined by Sabatier (1993). Some aspects of these long-term theories of policy change are useful for a twofold task: 1) to determine the extent to which both parties’ positions were eventually affected by the final agreement and the existence of causal chains that could explain the final agreement, and 2) to analytically delimit the introduction of emissions trading within the EU as an act of policy diffusion (Stokes and Berry 1999), policy transfer (Dolowitz and Marsh 1996, 2000) or lesson-drawing (Rose 1993).

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35 Developing economies were supposed to increase their energy efficiency as a by-product of economic readjustment. In this sense, Russia was supposed to diminish its emissions and, at the same time, might expect its permits to be allowed to increase.

36 The attempts to establish an EU CO\textsuperscript{2} tax clashed with the tough opposition of the UK. After that, the Commission decided to encourage Member States to establish national taxes on a product-by-product basis. See COM (96) 217, COM (97) 30.

37 Energy programs, such as ALTENER II or SAVE II, establish financial assistance to develop and adopt BAT technologies, in order to improve energy efficiency. Hence, these programs should be linked to the already mentioned use of regulation as a policy device, although the Commission links them to “market-based options”.

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The literature on social policy learning, framed within the broader category of long-term theories of policy change, places great emphasis on the role of ideological factors to attain a set of policy goals, translated into public policies or programs. For example, Hall argues that policy paradigms can be identified because “(...) Policy makers customarily work within a framework of ideas and standards that specify not only the goals of policy and the kind of instrument that can be used to attain them, but also the very nature of the problems that they are meant to be addressing” (1993, 279). Hall compares policy paradigms and their dynamics of change with the Kuhnian notion of a scientific paradigm and its process of change. Applied to change in policy-making, Hall asserts that dysfunctions and anomalies on the dominant policy paradigm can affect the settings of available policy instruments (first-order changes), the basic techniques to provide policy solutions (second-order changes) and, eventually, the very overarching goals behind the policy or program (third-order changes). Only in the last case can we talk about a change in paradigm.

Similarly, Sabatier (1993) keeps the role of ideas within the bounds of a policy subsystem concept, where beliefs are the “glue” that unites the different actors in advocacy coalitions within a subsystem. Members of an advocacy coalition share a set of interests and goals, perceived causal relationships and even normative axioms that constitute a belief system (Sabatier 1993, 28). Within this belief system, the deep normative core is the ultimate component to be modified by processes of policy change. The near policy core encompasses the basic strategies and policy positions for achieving the former normative axioms about “what ought to be done,” among them, the basic choices concerning policy instruments. Secondary aspects include a multitude of policy decisions and information necessary to implement the policy core.

Within the French tradition of public policy analysis, pre-strategic preferences are included within the broad realm of the policy-making process. This tendency fills one of the main gaps in most neo-institutionalist analyses (mainly rational choice institutionalism), that is, the problem of defining the influence of ideas in the definition of preferences and how they guide actor’s strategies to navigate the organizational

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38 Sabatier defines a policy subsystem as “…the set of actors who are involved in dealing with a policy problem” (1993, 24).
institutional structure. Muller (1995) pinpoints how policy-making is bounded by a set of axiomatic principles about “how the world ought to work.” The référentiel global encompasses an array of shared understandings that become a sort of a public philosophy (Weir 1992) that guides the definition of policy goals, very similar to the deep normative core defined by Sabatier. The sectoral référentiel, in contrast, encompasses the concrete procedures and operational assumptions about how certain policy goals may be achieved. Without an explicit reference to policy instruments, the sectoral référentiel clearly reflects Hall’s second and first ordered changes of a policy paradigm.

However, it should be noted that there is a striking difference in the role attributed to the State in the definition of the “overarching goals”, “deep beliefs” or “public philosophies” that underlie policy-making. The French school attributes an outstanding role to the State in the definition of their global référentiel. However, Hall’s proposal relies upon a view of limited pluralism, which conceives of policy change as the result of the flow of ideas between “the State”, and several social forces (1993, 289). Sabatier accepts this pluralistic view of equal actors competing to impose a certain belief system.

In the current study, it seems inaccurate to refer to the State, in both the US and EU cases. Such a reference disregards the powerful presence of steering cores—the US Senate and the EU Commission, which were very influential in defining the ideas that underlied both positions at Kyoto. The current study adopts an analytical view that takes into account the existence of a steering core that not only holds domestic “core ideas” about climate change policy, but also functions as a policy actor who translates those ideas into interests at Kyoto and, therefore, will resist change. In this sense, the French school proposal seems clearly inadequate, and both Sabatier, but especially Hall’s proposal, appears more appropriate for the current study. Whereas Sabatier conceives of steering structures as a funnel for competing societal interests, Hall recognizes the power of “steering cores” to dominate autonomously on the basis of “a coherent policy paradigm” (1993, 290). This seems especially accurate for analyzing an international negotiation and for explaining the influence of the US Senate as well as the EU Commission’s mixed competence and influence over Member State positions. The policy paradigm approach analytically shows how ideas about “what should be done” in

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39 Hall refers mainly to policy experts, other political parties, the media, and interests groups.
environmental policy can be translated into divergent positions in an international negotiation.⁴⁰

These three analytical approaches on the influence of ideas in the policy process suggest that the initial gridlock during the Kyoto negotiations around the introduction of an international emissions trading system might be the result of translating environmental policy paradigms into non-negotiable positions at this international negotiation. Specifically, the US translated the free-market environmentalism into the *sine qua non* condition of introducing an international emissions trading system (a new policy instrument). In the same manner, the EU transformed the sustainable development paradigm into a non-negotiable position for binding targets, fixed timetables and burden sharing reductions for all Annex I countries, very much according to its pervasive use of regulations for harmonizing environmental goals throughout the EU (Majone 1996a, 77).

Regulation and harmonization—the traditional EU environmental instrument and strategy—are reflected in the EU position at Kyoto for establishing binding QELROS for all Annex I countries. The clear preference for uniform measures to achieve these goals also reflects the preference for regulation, based upon the assumption that multiple loopholes could be created through the use of flexible instruments, mainly, the fact the US could achieve its QELROS by means of buying permits without really cutting domestic emissions. This would create international competitive disadvantages which the EU has historically tried to avoid within its own burden sharing agreements and, which in this case, would clearly harm EU economic interests.

In addition, emissions trading was an unfamiliar policy instrument for the EU. Rather, the Union found it much more convenient to try to extend its traditional regulatory approach, mainly based on command-and-control strategies, than to change the traditional CCPM by which climate change policy had been instituted. Both reasons help to explain why and how overarching goals, linked to the EU environmental policy

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⁴⁰ For an outstanding analytical treatment of the role of ideas in the international arena, and how they are translated into interests, see McNamara (1997). Although far from the exhaustive treatment that McNamara gives to the role of monetarism in the international political economy and its interaction with national interests, the current study agrees with the statement that “…interests and ideas are not viewed as competing causal factors, but we have to show the inherent connection among them. By clarifying how evolving definitions of interest can shape States’ preferences …I seek to overcome the shortcoming of approaches that takes preferences as given and static and leave unexplored how one strategy comes to be viewed as more appropriate than the other (McNamara 1997, 8).
paradigm, were transformed into a non-negotiable position opposing the initial establishment of an international emissions trading system.

B. **Kyoto’s Policy Broker**

In explaining policy change during critical periods, the literature often refers to the role developed by policy brokers (Sabatier 1993, Dente and Fareri 1993) and/or policy entrepreneurs (Kingdon 1984). Policy entrepreneurs have an active interest in promoting some of the solutions they can find in the broader stream of policy solutions.

Kingdon (1984) describes policy entrepreneurs as constantly on the look out for windows of opportunity through which to push their preferred ideas. Policy windows open on those relatively infrequent occasions when three usually separate process streams—problems, politics and policy ideas—come together. Policy entrepreneurs concerned about a particular problem search for solutions in the stream of policy ideas to couple to their problem, then try to take advantage of political receptivity at certain points in time to push the package of problem and solution. A successful policy entrepreneur possesses three basic qualities: first, he must be taken seriously either as an expert, as a leader of a powerful interest group, or as an authoritative decision-maker; second, he must be known for his political connections or negotiating skills; third, and probably most important successful entrepreneurs are persistent (Kingdon 1984: 189-190) (Majone 1996, 271).

Policy brokers or “mediators”, on the other hand, hold the dominant concern of keeping the level of political conflict constant within acceptable limits and reaching some reasonable solution to the problem (Sabatier 1993, 27). The central aim of the policy broker is to legitimize his/her presence as an actor in the process (Dente 1993, 8).

Let us investigate Chairman Estrada’s role in more detail before going further. The day before the Summit was to conclude, Chairman Estrada announced his intent to produce a paper with a proposed final approach. In an initial “non-paper” proposal, Estrada suggested QELROS of 5% reduction at the 1990 levels on a “take it or leave it” basis, which implied the possibility of a hypothetical failure of the Summit. This possibility was confirmed two days later, when Chairman Estrada proposed a new paper, noticing that he would not be able to negotiate without referring to specific numbers. In this new paper, he proposed again a global reduction of 5% of three greenhouse gases at 41.

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41 FCCC/CP/1997 CRP.2, 7th December 1997.
1990 levels for the period 2006-2012. The EU was given an 8% reduction and the US a 5% reduction, and there was no possibility to count sinks as discounts. He also proposed an emissions trading system that took its characteristics from the Bonn negotiations of AGB-8.

Facing strong resistance from developing countries on some carefully crafted language on the emissions trading system, Chairman Estrada pressed the negotiations and was able to pass the provisions in an altered form. As Grubb et al. note,

The new article would consist of three short sentences stating basically that the Parties would subsequently negotiate principles, rules etc. for emissions trading; that they may trade emissions; and that any trading would be supplemental to domestic action... he read the sentences twice, very slowly, and paused. He asked if there were any objections and brought down his gavel as India—some say joined by both China and the EU—raised flags to object. He ignored the flags and stormed ahead to the next paragraph on commitments. Any country that openly challenged his authority would almost certainly have been held responsible for destroying the Kyoto negotiations. None did (1999, 96).

The role played by Chairman Estrada, appears to be a clear example of policy brokering. He identified policies and practices that might be tolerated by all Parties involved and persuaded the countries to adopt them. He enjoyed the cognitive resources necessary for “sending signals” to both parts in order to reach an agreement. After holding the presidency of the AGBM, Estrada knew that the US would never agree to QELROS without flexible mechanisms of implementation. But he also was aware of the EU’s inflexibility regarding QELROS. In fact, the final agreement is based on Estrada’s proposal, which included both non-negotiable positions in a way that neither jeopardized the EU’s claim for QELROS nor the US demand for an international emissions trading system.

The final shape of the Protocol was crucially dependent upon this compromise. Summarizing, Starkey et al. note that the Kyoto NEPI was a “…compromise that had the United States accepting defeat on the provision of ‘meaningful participation by developing nations’ in return for inclusion in the protocol of language on the acceptability of emissions trading and related ideas as subjects for further negotiation

among the parties” (1999, 16). The importance of this compromise to the inclusion of the emissions trading system in the Kyoto Protocol is undeniable. Indeed, Chairman Estrada seemed to be indifferent to the specific policy disputes and participated simply because he had certain necessary skills to offer (Sabatier 1993, 27). In his role as Chairman he did not express any clear preferences for any one option other than saving the Kyoto Summit from failure.

It is open to speculation whether the US and the EU would have agreed in the absence of such a persuasive figure. Their obstinate resistance to make concessions seems to rely upon two opposing environmental policy paradigms: US free market environmentalism and EU sustainable development, the first with flexibility as a main principle, the second establishing binding targets, fixed timetables and burden sharing commitments as a non-negotiable axis.

VII. EMISSIONS TRADING WITHIN THE EU: A CASE OF POLICY TRANSFER?

This section provides an empirical discussion of the post-Kyoto development of an emissions trading system in the EU and investigates theoretical explanations for this apparent policy change. The section begins with a brief assessment of the status of the Kyoto NEPI in the US. The central question being investigated is “To what extent does post-conference NEPI adoption reflect an ongoing process of policy innovation in the EU and/or the US?”

In the US, the Kyoto protocol requires ratification by two-thirds of the Senate to become legally binding. While the Clinton Administration signed the final protocol, it did not submit the agreement to the Senate for ratification. The agreement was not submitted due to the belief that it would not be ratified because of Senate concerns over the participation of developing countries, among others. The failure of the Senate to ratify the agreement seriously undermined the process of policy innovation in the US. The US Environmental Protection Agency (EPA) summarizes the current status of the Kyoto NEPI.

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43 The final agreement recognizes the forthcoming implementation of an emissions trading system and obliges the US to carry out a 5% reduction for the period 2008-2012 on CO₂, CH₄ and NO₂, and the EU to achieve a 8% reduction in the three-basket gases for the same period.
Protocol: “Because of a Congressional prohibition, the U.S. Government has not undertaken any domestic regulatory actions to implement the Protocol, nor has it begun to prepare for its implementation. Meanwhile, the United States continues to participate in international negotiations on the details of the Kyoto mechanisms” (USEPA 2001). While the EPA and other executive bodies continue to work on acceptable measures related to the Protocol, the post-Summit position of the US remains relatively unchanged regarding the Kyoto NEPI. The story is quite different in the EU.

The EU’s post-Summit position on the Kyoto NEPI displays clear signs of policy change. Just after the Kyoto Protocol was signed, the EU began producing numerous documents, directly or indirectly related to the implementation of the burden sharing agreement, and with special emphasis on the arrangement of an EU emissions trading system.45 The final agreement at Kyoto included the possibility of setting up an international emissions trading system that will come into force in 2008 (Art. 17 Protocol). In the meantime, the Commission has repeatedly pointed out that “…the best preparation for the Community and its Member States might be to develop their own emission trading experience.”46

This Kyoto mechanism, though, is fundamentally different from the way the EU and its Member States have organized their environmental policy in recent decades. So the question arises, “Why is the EU so attentive to the implementation of a new and initially opposed policy instrument?” Is the EU currently engaged in a process of policy innovation as a result of an international compromise? Might we refer to a process of policy transfer?

This apparent change in the EU’s post-Kyoto strategy might be considered a process of policy diffusion, policy transfer or lesson-drawing. Adopting any of these three possible options excludes, however, other possible sources of policy innovation since in this case, policy innovation appears more clearly the result of international

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44 Internationally, for the Protocol to enter into force, it must be “ratified by enough countries to account for at least 55 percent of the industrialized world's carbon dioxide emissions” (USEPA 2001).
45 COM (99) 230 final, COM (98) 353, COM (99) 676, COM (00) 87, COM (00) 88, COM (00) 576.
interaction between two actors rather than the traditional endogenous sources that explain social policy learning over time.\textsuperscript{47}

The very subject of the current study—the acceptance and ex-post consideration of an emissions trading system in the EU environmental agenda—seems to restrict the analytical approach to be adopted. Nonetheless, the borrowing of certain concepts from the increasingly diverse studies on policy transfer requires some clarifications. Introducing a broad and widely-accepted definition of policy transfer is a useful starting point. Dolowitz and Marsh define policy transfer as “…processes by which knowledge of policies, administrative arrangements, institutions and ideas in one political system (past or present) are used in the development of policies, administrative arrangements, institutions and ideas in another political system” (2000, 5). The frontier that analytically distinguishes policy transfer from policy diffusion is, however, quite slight. Policy diffusion focuses more generally on the patterns of adoption of policy innovations from one political setting to another (Stokes and Berry 1999). Studies of policy diffusion are mainly concerned with the timing and sequence of program adoption, assuming that there is a consensus on political ends (Rose 1993, 25).

The concept of lesson-drawing is even closer to the broader concept of policy transfer. Dolowitz and Marsh consider lesson-drawing one of the extremes on the policy transfer continuum because actors choose policy transfer as a bounded rational response to a perceived process (2000, 14). For Page, such a decision is the result of determining how policies operate in exporter jurisdictions, how they might be applied in importer jurisdictions and what modifications are needed to make those innovations work (2000, 2).\textsuperscript{48} Accordingly, policy transfer studies would place their emphasis on the decision-making process, dealing with transfer rather than with the adaptations needed.

In its most unsophisticated form, policy transfer studies focus on analyzing what is transferred, who is transferring, and especially how and why policy transfer is

\textsuperscript{47} We are referring to the learning processes analyzed by Sabatier and Jenkins-Smith (1993). This study points out how these processes require a long period of time to be analyzed, and are processes of policy feedback. Similarly, Hall (1989, 1993) analyzes the process of social policy learning in the study of British economic policymaking.

\textsuperscript{48} Specifically, Rose refers to lesson drawing as “…whether programs are fungible, that is capable of being put into effect in more than one place” (1993, 21). He disputes any similarity to policy learning (p.23), although he recognizes that lesson drawing can be inspired by past experiences that seem to have successfully dealt with a problem (chapter 7).
occurring. Applying these dimensions of analysis, it might be argued that exactly what, why and how policy transfer operates acquires special relevance for explaining why an emissions trading system (a NEPI) is being considered within the EU as the result of an international agreement, which left unchanged the EU environmental paradigm.

The question of how to organize an emissions trading system within the Union is closely linked to the implementation of the burden sharing commitment under the EU bubble (Art. 4, Protocol). Trading requires a high degree of certainty on monitoring actual emissions for both initially allocating quotas and for having an overview of progress in reductions,\(^49\) but also for accounting for transfers, adjustment of assigned amounts, verification of emission units and of certified reductions.\(^50\) However, a more realistic and reliable way of implementing an emissions trading system might choose “…a relatively small number of economic sectors and sources that contribute significantly to total emissions and for which the costs of reduction effort differ significantly would substantially satisfy the criteria of economic efficiency, environmental effectiveness, administrative feasibility and the existence of alternative policies and measures” (COM (00)87, 13).\(^51\) Moreover, the Commission has already proposed the Large Combustion Plan and IPPC directives as useful starting points for defining the trading system population.

The Commission has been an extremely active actor in boosting the EU emissions trading system. This entrepreneurial role could be attributed to the well-known promoter role of the Commission in environmental policy. However, in a case of mixed competence, it is also useful to look at the clear implication that such a policy instrument has for Pillar 1. This endeavor might offer clear tips for understanding the adoption of the policy instrument in an area that is often transectoral, affecting both economic and environmental issues.

The issue arises of how to organize the initial allocation of emissions permits. If Member States were allowed to buy permits on the open market and then give them to

\(^49\) For more details, see Council Decision 1999/296/EC, which modifies Decision 93/389/EC on the Monitoring Mechanism.


\(^51\) Note that this set of criteria would eliminate the possibility of including diffuse sources of greenhouse gases for sectors where common policies are not clearly developed.
certain enterprises for free or without imposing conditions, it would constitute state aid and would be inconsistent with EU competition rules. For this reason, the Commission seems to have already assumed that the allocation of quotas will be made to private companies within the same sector—mainly, energy producers or energy-intensive industries.

This does not eliminate, however, the potential danger of damaging the correct functioning of the Internal Market and harming the economic competitiveness of relevant economic actors. Although emissions targets within the EU bubble have been established by sector and country, a Member State might be tempted to exempt particular sectors or set low sectoral targets, since allocation not only will depend on how much a sector emits, but also on how much it costs to achieve a certain target. This would constitute potentially distortionary aid that could counter EU competition law.

This last temptation of low sectoral targets would be more appealing if the initial allocation of permits is free of charge—“grandfathering”. Grandfathering would raise issues of internal discrimination at the EU level and discrimination against foreign property. In the first case, if a Member State distributes permits through grandfathering and other Member States opt for periodic auctioning, a company in the second Member States would be disadvantaged in relation to a competitor in the first Member State. Because the company in the first Member State is enjoying a realizable asset for free, distortions of competition could arise. By the same token, discrimination against third countries could arise through grandfathering. It seems, though, that the Commission has a clear preference for periodic auctioning, although the final position is still awaiting further opinions to be expressed by stakeholders. However, periodic auctioning also presents some initial pitfalls, mainly, the possibility of hoarding allowances and hampering the entry of new companies, and the opportunity cost attached to companies that, at the moment of distributing the allowances, might have already implemented measures to reduce greenhouse gases (mainly CO₂).

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52 COM (99) 230 final: 15.
53 COM (00) 87 final: 17. This is the so-called “upstream” trading system.
54 Ibid: 18.
This question considers the supplementary nature of the emissions trading system as a policy instrument to reduce greenhouse gas emissions. New companies, unlike old, will have no costs to bear in respect to “stranded assets” (investments made without the knowledge of subsequent policy instruments). This reasoning applies not only to the implementation of an EU emissions trading system, but summarizes the EU international position towards emissions trading, which has always been considered supplemental to other CCPM. The underlying argument is that there is an opportunity cost attached to the use of emissions trading by which a firm can consider it more profitable to “opt-out” of the system and achieve emissions reductions by other means. However, and for the sake of avoiding distortions of competition, the Commission must assure that every firm within the same sector is regulated by other policies and measures that represent at least a similar economic effort or a “comparable commitment” in terms of emission abatements. This might affect particularly those companies that have already implemented traditional EU CCPM, mainly, technical and regulative measures.

Internal Market challenges are obvious when analyzing allowances prices. Taking into account that France, the UK and Denmark have already implemented or considered the implementation of national emissions trading systems, the potential for quite divergent prices in allowances might easily create a situation of “environmental dumping” by firms and Member States playing with prices. If there is not a harmonized price within a sector, some Member States—especially those allowed to increase their emissions—would likely try to set low prices so that their companies can easily sell the allowances, whether to EU Member States or to third parties, when the international system starts to function. Equally, the most inefficient companies within the sector would try to achieve their commitments by buying those permits, which would eventually reflect distortions of competition. Once again, the supplemental character of emissions trading within the EU seems to be an essential condition for assuring its economic efficiency.

56 The Commission has clearly stated that domestic common policies and measures do have benefits other than reducing greenhouse gases, such as the improvement of urban air quality and beneficial effects on other policy areas (e.g., energy supply, road congestion).
58 In the “opt-out” scheme, the EU as a whole decides on all sectors to be covered by the trading system in principle. But some Member States may opt-out from this agreement in certain sectors or completely.
Table 3, at the end of this document, summarizes the main characteristics of the national emissions trading systems already designed and/or implemented in France, the UK and Denmark. Although its is far from exhaustive, this basic table highlights how the implementation of diverging emissions trading systems at the national level may have further consequences for the Internal Market. These consequences are related to state aid, not only directly—through, for instance, financial assistance—but also indirectly by the initial allocation of permits/allowances. This may be the case in the UK and Denmark, where the system is based upon grandfathering, that is, allowances are initially allocated by the State on the basis of previous records of emissions. Whereas the British Department of Environment, Transport and the Regions has already recognized that this constitutes “notifiable State aid”, nothing has been said about the Danish Cap and Trading Scheme. Nonetheless, the British proposal establishes an accompanying Scheme with a Financial Incentive to those companies that are willing to offer absolute emission reductions compared to baseline levels. It is unclear whether this “financial assistance” will create a competitive disadvantage (i.e., national ability to avoid harmonization) that the Commission would like to preempt.

The gathered information suggests a possible process of policy transfer. Probably, the most common variable in the policy transfer literature is the question of why and how countries borrow policies and programs from each other (Page 2000, 5). This question centers on the circumstances under which transfer takes place. The circumstances under which an emissions trading system was adopted provide the cornerstone for explaining this possible process of policy transfer. Therefore, the current study cannot refer to the circumstances without first referring to what is being transferred. Among the different categories identified, the EU is transferring just a policy instrument. Reintroducing Hall (1993), what is being modified is just the instrument through which to achieve an overall policy goal (mandatory CO₂ emission cuts for each Member State), which remains untouched and unquestioned, as the Commission itself recognizes.61

59 COM (00) 87 final: 15-16, 20-23.
60 Following the latest version of revised Community guidelines of State aid for environmental protection (September 13, 2000).
61 See (COM (98) 353 final: 12; COM (00) 88 final: 2).
However, it is useful to consider what might have happened if the “transfer period” would have been shorter. As Page argues, “…over a longer time period, the innovations become domesticated as the relationship between established innovations and policies shapes their developments” (2000, 5). This seems to be the case in the “step-by-step” approach adopted by the EU in relation to the emissions trading system. Time becomes a strategic factor allowing the EU to gradually adopt “first-order changes” without challenging measures (CCPM) and goals (mandatory emission reductions) already in operation.

Time pressure, though, could have functioned as a veto factor which might make the emissions trading system appear to be an “alien import”. Nonetheless, the EU appears to have enough time to harmonize the design of the policy instrument, lessening the possible impact of the instrument on two “overarching goals”: 1) The achievement of burden sharing emissions cuts in each Member State, according to the traditional EU environmental paradigm, and 2) the correct operation of the Internal Market.

By investigating the general circumstances of the transfer process, the current study can answer the question of why and what type of policy transfer resulted from the introduction of the Kyoto NEPI. As indicated above, the international emissions trading system was introduced as a last-minute decision in the context of a gridlock situation where both parties felt compelled to make concessions. Regarding exactly what was introduced, Dolowitz and Marsh (2000, 13) posit, policy transfer is not an all-or-nothing process, but rather, can run a continuum from coercion to lesson drawing. Therefore, from the gathered empirical evidence, the adoption of the Kyoto NEPI can be identified as a voluntary policy instrument driven by the perception of necessity (Dolowitz and Marsh 2000, 13). First, the EU only has adopted a policy instrument that, due to the time period available for adaptation, does not jeopardize the EU environmental or economic paradigm. That is, it does not challenge the overarching goals that have guided environmental policy-making, but only the instruments. Overall, this change can be classified as only a first-order change. Second, due to its leading role in world climate change policy, the EU was pressured to accept the instrument under the risk of making COP-3 fail. But more importantly, the ultimate decision about importing this policy instrument seems to respond to a bounded-rational decision: the instrument provides the
desired flexibility in the policy area and, at the same time, the Commission’s leading role allows it to protect former “policy legacies” (mainly, CCPM) as well as to circumvent “third-order changes” through the harmonization of its own system.

VIII. CONCLUSIONS

The current study investigates the introduction of an interesting and innovative policy instrument into international and domestic environmental policy-making: an emissions trading system. It seems clear that the compromise reached at Kyoto was dependent upon the inclusion of this NEPI and owed a great deal to the role of Chairman Estrada. Nevertheless, questions remain whether a process of post-Summit policy innovation has occurred or is occurring. In the US, the process of policy innovation regarding the NEPI appears to have largely stalled, while in the EU, the process continues. This is a surprising conclusion because of the EU’s initial opposition to the emissions trading system.

The current study reveals the importance of US and EU environmental policy-making foundations for the adoption of international environmental compromises, in particular for the adoption of a NEPI. Before and after the culmination of the Kyoto Summit, the US made clear its opposition to subjecting US business interests to binding targets through mandatory measures. The US translated its free-market environmentalist paradigm into a non-negotiable demand to implement an emissions trading system that would preserve existing domestic flexibility. Yet, before and during the Summit, the EU manifested its distrust of flexible instruments, which could be held hostage by government procrastination and hide industry hypocrisy (Golub 1998, 23). In fact, this opposition to emissions trading may reflect the clear EU preference for harmonizing sustainable development in the EU through the use of uniform regulation, mainly, command-and-control instruments.

It is important to emphasize that domestic environmental policy paradigms emerged as important explanatory factors of how the two central actors at Kyoto defined their initial positions and interests. The positions and interests also interacted at the international level. For example, while the EU’s bubble concept evolved and had to be domestically implemented according to previous CCPM, it had to be defended
internationally. Although it is difficult to demonstrate the causal path that links domestic ideas in a policy area with international interests at an international conference, it is still possible to recognize the “domestic policy legacies” of both actors, not only in the preferred instrument, but also in defense of the overall goals that ought to guide climate change policy. It also seems that these domestic policy paradigms shape the process of policy transfer.

Concerning the issue of timing, the EU and its Members began considering emissions trading, whether at the national or EU level, after the Kyoto Summit. The question of whether the instrument would have been adopted in the absence of the Protocol remains necessarily unanswered. Nevertheless, the EU decision seems to respond to a bounded rational action: emissions trading provided the needed flexibility to EU climate change policy and, by opting for a common proposal, the Commission seems to be trying to avoid harmonization issues that would harm the Internal Market. In this way, the overall goals that inspire sustainable development through regulation remain unaltered: emissions trading does not exempt Member States or companies from complying with binding compromises, whether they affect or complement former CCPM.

Thus, in conclusion, the current study identifies the important role of domestic policy paradigms for both shaping the formation of national interests in international arenas and determining the contours of the process of policy transfer. Moreover, within the emerging literature on policy transfer, it may raise questions about the role of policy paradigms for explaining why political systems transfer policies and programs, rather than emulate them. Further research will be necessary to answer more fully these questions and to determine the precise nature and extent of the EU’s ongoing process of policy innovation regarding the Kyoto NEPI.
REFERENCES


Dales, J. H. (1968), Pollution, Property and Prices, Toronto: University of Toronto Press.


Table 1: Greenhouse Gas Emissions in the EU\textsuperscript{62}

<table>
<thead>
<tr>
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<td>64</td>
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<td>7.5</td>
<td>-6</td>
<td>196</td>
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<td>6.0</td>
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<td>Spain</td>
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<td>8.0</td>
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<td>347</td>
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<td>Sweden</td>
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<td>-6.9</td>
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<td>Total EU</td>
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<td></td>
<td>-8</td>
<td>3998</td>
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\textsuperscript{62} CO\textsubscript{2}, CH\textsubscript{4} and N\textsubscript{2}O
<table>
<thead>
<tr>
<th>Measure</th>
<th>Reference</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing CO\textsubscript{2} emissions for passengers cars</td>
<td>COM (95) 689</td>
<td>+/- 15% of total emissions reductions under Kyoto. 80-90 million tons.</td>
</tr>
<tr>
<td>Reducing CO\textsubscript{2} emissions from freight transport by road</td>
<td>COM (97) 242, COM (97) 243, COM(95) 691</td>
<td>40% equivalent decrease in CO\textsubscript{2} emission from freight</td>
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<tr>
<td>Taxation of aircraft fuel/kerosene</td>
<td>COM (97) 30</td>
<td>Not yet determined</td>
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<tr>
<td>Common action progressively to reduce/remove fossil fuel and other subsidies, tax schemes and regulations which counteract an efficient use of energy</td>
<td>Decision 36/32/93/ECSC</td>
<td>Reduction in CH\textsubscript{4} emissions. Promotion of domestic less carbon intensive fuels.</td>
</tr>
<tr>
<td>Promoting energy efficiency</td>
<td>Council decision 96/737 (SAVE II), followed by COM (97) 69</td>
<td>Reduce growth in energy intensity around 20% of total current energy consumption.</td>
</tr>
<tr>
<td>Improved technical performance and design of appliances and equipment</td>
<td>92/42/EC, 95/57/EC</td>
<td>Electricity saving of 10%.</td>
</tr>
<tr>
<td>IPPC</td>
<td>96/61EC</td>
<td>Implementation of BAT</td>
</tr>
<tr>
<td>Promote an increased use of renewables in the EU</td>
<td>COM (97) 599. ALTENER II</td>
<td>400m ton of CO\textsubscript{2} saved per year.</td>
</tr>
<tr>
<td>Promotion of environmental agreements</td>
<td>COM (96) 561</td>
<td>Not determined yet</td>
</tr>
<tr>
<td>Measures to promote the increased use of combines heat and power (CHP) generation</td>
<td>COM (97) 514</td>
<td>Double use of CHP by 2010 (from 9 to 18%)</td>
</tr>
</tbody>
</table>

Source: Derived from material in COM (99) 230 final.
<table>
<thead>
<tr>
<th></th>
<th>Goal</th>
<th>Who is involved</th>
<th>Allocation permits</th>
<th>Interaction with other policies</th>
<th>State Aid</th>
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<td>Energy intensive companies</td>
<td>Grandfathering</td>
<td>Climate Change Levy/Voluntary Agreements</td>
<td>Yes (Financial Incentive)</td>
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<tr>
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<td>-21%</td>
<td>Electricity sector</td>
<td>Grandfathering</td>
<td>Electricity Reform Agreements</td>
<td>No</td>
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<td>France</td>
<td>-5.2%</td>
<td>Energy-intensive companies</td>
<td>By achieved objectives</td>
<td>Voluntary Agreements</td>
<td>No</td>
</tr>
<tr>
<td>EU</td>
<td>-8% (“bubble”)</td>
<td>Energy-intensive companies</td>
<td>Periodic Auctioning</td>
<td>Previous CCPM</td>
<td>No</td>
</tr>
</tbody>
</table>


For year 2010 at 1990 levels.