

# **THE KYOTO PROTOCOL'S EMISSIONS TRADING SYSTEM:**

## **An EU-US Environmental Flip-Flop**

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### **Introduction:**

The 1997 Kyoto protocol on climate change continues to be a target of pointed praise and condemnation 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.<sup>1</sup> 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.<sup>2</sup>

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). Prior to Kyoto, the US promoted this NEPI while the EU opposed it. After Kyoto, US support surprisingly waned for the emissions trading system while the EU began to design, in earnest, a domestic emissions trading system. Such a “flip-flop” in positions generates two interesting questions related to the NEPI: 1) why did the EU and US flip-flop positions after the Kyoto Summit, and 2) to what extent do post-conference discussions reflect this flip-flop?

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 opposing policy approaches are identified at Kyoto: US free-market environmentalism and EU regulatory environmentalism. Despite these different approaches, the US and EU were able to reach agreement, which significantly facilitated the signing of the Kyoto Protocol. While the EU initially opposed the inclusion of this particular NEPI in the final agreement, the Kyoto Protocol now appears to be a significant external source of policy innovation in the Union.

This study proceeds in the following manner. First, it describes the origins and modalities of the international emissions trading system. Second, the study discusses the opposing US and EU positions during the Kyoto negotiations based on their respective approaches to international environmental policy. Third, the study briefly addresses the EU-US flip-flop at the Kyoto Summit. Fourth, the study investigates the post-summit

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<sup>1</sup> For example, see Banks (2000), Dawson (1999), Dobes (1999), Grubb et al. (1999), Worika et al. (1999), Johnston (1998), Missfeldt (1998), Schneider (1998), Trexler and Kosloff (1998), and Yamin (1998).

<sup>2</sup> For useful discussions of NEPIs in Europe, see Jordan et al. (2000) and Golub (1998).

actions of these two actors, focusing on the domestic politics that explain their respective positions and actions. The study concludes with a discussion of the findings and implications for future developments in the Kyoto emissions trading system.

### **A Kyoto NEPI: The Emissions Trading System:**

The Kyoto NEPI—an international emissions trading system—was introduced based on 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, 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) (Johnston 1998).<sup>3</sup>

The idea of an emissions trading system was a new approach to the problem of climate change (Article 17, Kyoto protocol). Dobes provides a useful general description of the mechanics behind this NEPI:

Tradable permits... 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).

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 uncertainty and complexity of this market-based NEPI reflects its relative newness as a policy instrument and prefigures the subsequent skepticism and outright resistance encountered at Kyoto.

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<sup>3</sup> See Banks for a discussion of the history of the tradable permit system (2000, 487).

## **The US and EU Positions at Kyoto:**

The opposing US and EU positions at Kyoto are largely explained by their traditional approaches to international environmental policy. The US approach can be conceptualized as one of free market environmentalism, in which faith is placed in market-based solutions. Alternatively, the EU approach, which has been wary of market-based solutions, often has chosen regulatory solutions to the problems of climate change.

### **US Free Market Environmentalism**

As a single nation-state, the US position is, for analytical purposes, fairly straightforward. As a federal system, the US is often considered a unitary actor in the international relations literature. However, it should be noted that, in Grubb's words,

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 stranglehold on what can be implemented (Grubb et al. 1999, 32).

In addition to this legislative constraint, the US administration sent a large delegation to the Kyoto summit—a delegation comprised of diverse interests and agendas. The delegation included a senior negotiating team, a White House team, representatives from the departments of State, Energy, Agriculture, Defense, Treasury, Justice, and Labor, as well as representatives from the Environmental Protection Agency, the US Agency for International Development and the National Oceanographic and Atmospheric Administration. Divisions among these various actors emerged as early as 1996, during the second Conference of the Parties, known as COP-2 (Grubb et al. 1999, 59).<sup>4</sup> Thus, while various actors were involved in defining and implementing the US position at Kyoto, the current study focuses on a general environmental approach shared by these actors.

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 signaled US determination to pursue market-based solutions to climate change. Indeed, as Campbell (1998) argues:

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<sup>4</sup> The 1992 Earth Summit in Rio de Janeiro 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—a central issue of the current study—was held in Kyoto in December 1997.

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 emphasized: 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.<sup>5</sup> Such support is not particularly surprising, given that market-based mechanisms typically reflect and encourage strong incentives for business. A market-based mechanism, which enhances the pursuit of profit, is more attractive 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 voluntary nature and flexibility of the Kyoto NEPI could replace command and control regulation and environmental taxation with greater corporate control over the pursuit of profit.

### **Risk Prevention and EU Regulatory Environmentalism**

As a regional integration organization, the EU had developed a position that was more complex than that of the US. The EU was a signatory to the protocol, but so too were its member states because international environmental policy is an area of “mixed competence”.<sup>6</sup> The legal complexities of relations between the EU and member states led to numerous questions on the part of third parties about which actor—the EU or each member state—was responsible for implementing the issues under negotiation. 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 (see below). This was the basis of Union’s activities at the summit.

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<sup>5</sup> The International Chamber of Commerce’s statement on Kyoto reflects this faith in market-based environmentalism (1997). For more on the business perspective on the Kyoto Protocol, see Carr and Thomas (1998).

<sup>6</sup> As Sbragia with Damro (1999) point out, the EU 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 of the Council of Ministers speaks when areas of mixed competence are addressed. See also Jupille and Caporaso (1998) and Macrory and Hession (1996, 114).

At Kyoto, the Union strongly supported stringent and quantified emissions reductions as a way to fight climate change. The EU position reflects a gradual and complex development of regulatory instruments. Rather than placing faith in market-based solutions, the basis of the EU approach to climate change is found in regulatory solutions. The EU has largely developed its environmental policy on the basis of regulation, addressing not only product, but also process regulations (Majone 1996, 58). By imposing uniform and detailed directives within the EU, both the member states and the Commission overcame environmental dumping, the transaction costs associated with settling environmental issues (e.g., gathering information, bargaining) and the credibility problems attached to policing at the national level. Moreover, EU environmental policy was developed under the assumption that a heavy reliance on free-market solutions would misallocate natural resources and produce inadequate incentives to prevent environmental degradation (Golub 1998, 8). Within the context of avoiding market failures, EU environmental goals have been inspired by the need for prevention rather than cure, solving problems “at the source”, and the polluters-pay principle.

Within these general principles, climate change policy was based on a common understanding that scientific uncertainties should not be interpreted as constraints on intervention. Moreover, within the EU it was considered that industrialized countries had accumulated specific responsibility to reduce CO<sub>2</sub> emissions and should bear the cost of stringent regulations. However, the objective of stabilizing CO<sub>2</sub> emissions encountered suspicion in the so-called “cohesion countries”—Spain, Portugal, Greece and Ireland (Haigh, 1996)—which feared that specific CO<sub>2</sub> emission reductions would restrict their economic growth.

The question of “who should do what” remained unanswered until the Dutch assumed the Presidency of the EU in 1996. The Dutch presidency took great advantage of the knowledge gathered since 1995, about each member state’s CO<sub>2</sub> emission objectives (Nolin 1997). It was also aware of the special treatment being demanded by the cohesion countries and the emissions decreases being experienced by the UK and Germany, due to factors such as economic restructuring in Germany and moderate UK economic growth rates. In addition, the Dutch presidency had to consider the impact of member states switching from petroleum to gas and new national policies in the energy and industrial sectors. This knowledge facilitated the negotiation of the burden sharing agreement. As a result, the EU developed a “bubble” commitment that distributed the level of CO<sub>2</sub> emissions reductions/increases by sectoral and national criteria.<sup>7</sup> The commitment, adopted in the Environmental Council of Ministers of March 1997, initially proposed as a

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<sup>7</sup> The “EU bubble” reflects the shared commitment by member states which allowed each state to increase or commit to reduce its CO<sub>2</sub> emissions, taking as a reference 1990 levels in order to achieve a common EU reduction of –7 percent by 2010. This “bubble” commitment reflected the complexities of the EU’s mixed competency in environmental policy and 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. This ambiguity “earned the EU almost universal hostility from the rest of the OECD...” (Grubb et al. 1999, 86). Very early at the summit, Canada (and the US) challenged the EU bubble as inequitable because it would allow for wide differentiation within the EU while denying similar differentiation for other parties to the protocol. Moreover, it was not clear to what extent the EU would be able to achieve its commitment after Union enlargement.

15 percent reduction and eventually fixed as -8 percent, was distributed among members as shown in Table 1.

Despite the EU bubble agreement, there were some other reasons for the EU taking the role of international leader in climate change policy. The call for international leadership in climate change policy was strongly sponsored not only by the Commission, but also by the EU Parliament (EP) and the European Environmental Bureau.<sup>8</sup> The aspiration to international leadership, though, required the persuasion of member states to cooperate in making stringent reduction objectives instead of free-riding. In internal debates, leadership in reducing CO<sub>2</sub> emissions was understood as economically beneficial if, parallel to strong commitments, incentives for developing environmentally-sound technology could be provided. Internal compromise with climate change policy, hence, could help to occupy the high ground of environmentally sound technology before the US and Japan arrived (Huber 1997, 146).

Parallel to this call for leadership, in the evolution of climate change policies the Commission found the complex interrelatedness of economics and climate change too difficult to steer by traditional regulatory devices alone (Huber 1997, 144). This was especially obvious if we take into account that the reduction of CO<sub>2</sub> emissions concerned all energy-intensive sectors. With this object in mind, the former Directorate General (DG) II for Economic Analysis carried out the conceptualization of economic instruments during the 1990s.<sup>9</sup> Although most of its efforts were focused on tradable emission permits, after the decision at the Environmental Council to develop a Community tax to deal with CO<sub>2</sub> emissions, DG II started working on the proposal for a carbon tax.<sup>10</sup> The carbon tax, though, eventually failed because of the distributive inequalities that such a tax might produce.

As the preceding discussion suggests, EU climate change policy before Kyoto involved a strong reliance on regulation, a belief in the need to prevent hypothetical future risks caused by CO<sub>2</sub> emissions, a commitment to international leadership in the policy area, and an internal and less-publicized realization that regulations alone were insufficient to fight climate change.

### **The Kyoto Flip-Flop:**

Prior to the Kyoto Summit, the EU frequently expressed its lack of confidence in market-based mechanisms, especially the US's emissions trading system. The Union was facing a clear disadvantage because its own system was completely unfamiliar with emissions trading systems and the means by which to pursue their implementation. In

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<sup>8</sup> The European Environmental Bureau is the federation of European environmental associations. It encompasses 141 members in 25 countries, and it has a consultative status and maintains regular relations with the Council of Europe, the EU Commission and European Parliament, the Economic and Social Committee of the European Union, the Organization for Economic Cooperation and Development and the United Nations Commission of Sustainable Development.

<sup>9</sup> For example, see COM (88) 656, "The Greenhouse effect and the Commission"; or SEC (91) 1744 final, "Commission strategy to limit Carbon Dioxide emissions and to improve energy efficiency."

<sup>10</sup> COM (92) 226, "Proposal for a Council Directive introducing and tax on CO<sub>2</sub> emissions and Energy."

**Table 1: Greenhouse Gas Emissions in the EU (CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O)**

	Share of EU emissions in 1990	CO <sub>2</sub> Emissions in 1990 (in million ton equivalents)	Per capita emissions in 1990 (in million ton equivalents)	Evolution from 1900 to 1994 (% change)	Evolution from 1990 to 1995 (% change)	Burden sharing (%)	Burden sharing of CO <sub>2</sub> (in million ton equivalents)
Austria	1,7	74	9,2	-1,3	0,6	-13	64
Belgium	3,2	139	13,7	4,1	4,4	-7,5	129
Denmark	1,7	72	13,7	15,2	10,0	-21	57
Finland	1,7	73	14,2	-3,6	-0,5	0	73
France	14,7	637	11,0	-2,9	-1,1	0	637
Germany	27,7	1201	14,7	-12,1	-12,3	-21	949
Greece	2,4	104	9,9	3,2	4,6	25	130
Ireland	1,3	57	16,0	2,6	4,3	13	64
Italy	12,5	542	9,5	-2,9	1,7	-6,5	506
Luxembourg	0,3	14	34,7	-10,2	-45,0	-28	10
Netherlands	4,8	208	13,5	3,4	7,5	-6	196
Portugal	1,6	69	7,0	6,0		27	87
Spain	7,0	301	7,6	4,0	8,0	15	347
Sweden	1,6	69	7,9	-2,6	-3,3	4	72
UK	17,9	775	13,3	-6,9	-8,4	-12,5	678
Total EU	100	4334	13,1			-8	3998

addition, the EU's heavy dependence on regulatory instruments imposed sunk costs on its climate change policies and served to solidify Commission opposition to the emissions trading system. Moreover, the EU argued that the acceptance of the NEPI without binding quantified emissions limitations and reduction objectives (QELROS) would encourage the practical non-commitment of some developed countries. For example, the US could achieve its obligations through buying permits/credits from other countries. In the corridors at Kyoto the suspicion emerged that the US was already negotiating with Russia in order to purchase permits (Campbell 1998). In their proposal, however, Switzerland, Canada, Australia, Norway and New Zealand supported the US.

Despite these concerns, the EU moderated its position on the Kyoto NEPI (Damro and Luaces forthcoming 2003). While the EU preferred a regulatory approach, as long as the Union lacked competence in crucial areas of fiscal and energy policies, concerns remained about its authority to promote emissions cuts through fiscal measures.<sup>11</sup> In addition, the EU's Fifth Environmental Action Programme (EAP)<sup>12</sup> had already recognized the limitations of a purely regulatory approach to tackle the climate change problem and acknowledged the need for a broader range of instruments for emissions reductions to be effective.<sup>13</sup> The combination of these factors and the threat of the possible failure of the Kyoto summit contributed to the EU's acceptance of the Kyoto NEPI. The EU feared a failure of the summit because of its perceived role as a leader in international climate change policy.<sup>14</sup>

Toward the end of the negotiations, the US linked its emissions cuts with the creation 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. Once the exact numbers were agreed, an EU-US compromise was reached. Thus, the EU and US reached a compromise and both countries signed the protocol. The negotiators left Kyoto and focused their energies on the upcoming national ratification processes and questions about implementation of the agreement.

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<sup>11</sup> The attempts to establish an EU CO<sub>2</sub> tax were opposed by 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.

<sup>12</sup> The Environmental Action Programs contain policy plans and objectives, as well as fundamental notions about environmental management. In most cases they are derived from developments in one or more member states, but also emerge as a reaction to external events. These plans, which usually cover a period of 4-5 years, represent the basic reference framework for EU environmental policy, especially before the Single European Act, which gave environmental issues proper legal recognition. However, Environmental Action Programs have continued to act as comprehensive environmental agendas, drafted by the Commission and containing the pool of environmental issues potentially open to consideration in the forthcoming five years.

<sup>13</sup> Energy programs, such as ALTENER II or SAVE II, established financial assistance to develop and adopt BAT technologies, in order to improve energy efficiency.

<sup>14</sup> On the EU's role as a leader in international climate change policy, see Sbragia with Damro (1999).

## **The Status of the Post-Kyoto Emissions Trading System:**

This section provides a discussion of the post-Kyoto development of an emissions trading system. While the US has largely jettisoned the idea of ratifying the Kyoto Protocol and implementing the emissions trading system, the EU has taken a very different approach. Despite the complexities of formalizing such an emissions trading system, the EU has actively embraced the NEPI.

### **The US Response to the Kyoto Protocol**

Prior to the Kyoto Summit, the fate of the final protocol in the US was foreshadowed by the Byrd-Hagel Resolution, which passed in the US Senate by an impressive margin of 95-0. While Byrd-Hagel was a non-binding resolution, it did indicate the Senate's intent not to ratify any agreement at Kyoto that lacked commitments by developing countries to reduce greenhouse gases. While the US acknowledged that industrialized countries accounted for 70 percent of greenhouse gases, its reluctance to ratify grew out of concerns over future sources of greenhouse gases. According to Eizenstat, 'by around 2015 China will 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).

In the US, the Kyoto protocol required ratification by two-thirds of the Senate to become legally binding.<sup>15</sup> Despite signing the agreement, the Clinton Administration did not submit it to the Senate for ratification because of the concern that the final protocol did not require sufficient participation by developing countries to satisfy the Senate. US Undersecretary of State Stuart Eizenstat argued that the incorporation of developing countries into the protocol should be a goal for post-Kyoto negotiations. 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).<sup>16</sup> Nevertheless, even with the CDM, the failure to attain meaningful participation in emission reductions by developing countries would prove a critical element in the US Senate's opposition to ratifying the protocol.

The Senate's opposition to ratifying the agreement seriously undermined the process of policy innovation on this issue in the US. By the end of the Clinton Administration, the agreement still remained in limbo in the US. The US Environmental Protection Agency (EPA) summarized the status of the Kyoto protocol at the end of the Clinton administration: 'Because of a Congressional prohibition, the U.S. Government has not undertaken any domestic regulatory actions to implement the Protocol, nor has it

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<sup>15</sup> 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).

<sup>16</sup> 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.

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). This limited engagement in the process of implementing Kyoto would not last long.

The new administration of George W. Bush dealt the NEPI a further blow. Reversing a campaign pledge, the Bush Administration pulled out of the Kyoto process when it announced in March 2001, that it would not support the Kyoto Protocol. This new position roiled transatlantic relations on climate change. During the COP-6 meeting in Bonn, Germany, negotiations between the US and EU collapsed over the appropriateness of LULUCF (land use, land use change and forestry) activities as a means to gain credits in CO<sub>2</sub> emissions. In addition, as a result of the Bush administration's new position, the US failed to contribute to the COP-7 meeting in late 2001, in Marrakech, Morocco (Environment Watch, 2001). The COP-7 meeting marked a very public turning point in the EU-US flip-flop over their approaches to climate change and the emissions trading system. For the first time, the US appeared to reject formally the Kyoto process. At the same time, the EU displayed its serious commitment to the process by persuading enough countries to agree to terms and timetables for implementing the emissions trading system.

After the COP-7 meeting in Marrakech, the White House issued an alternative plan to the Kyoto emissions trading system on February 14, 2002. By replacing the previous agreements on the NEPI with a new 'cap and trade' system that does not include CO<sub>2</sub>, the Bush Administration has dampened, if not eliminated, US support for the Kyoto process and the emissions trading system. Even if the administration were sympathetic to the protocol, the US Senate continues to resist ratification of the agreement. These domestic political obstacles have isolated the US from much of the international community's work on the post-Kyoto emissions trading system. The story is quite different on the other side of the Atlantic, where the EU has taken a lead role in supporting and developing the emissions trading system.

### **The EU Response to the Kyoto Protocol**

The EU's post-summit activities differ significantly from those of the US and clearly reflect the Commission's support for the Kyoto emissions trading system. 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 particularly emphasizing the arrangement of an EU emissions trading system.<sup>17</sup> Since the signing of the Kyoto Protocol, 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.'<sup>18</sup> The EU has acted on this assertion although this NEPI is

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<sup>17</sup> COM (99) 230 final, COM (98) 353, COM (99) 676, COM (00) 87, COM (00) 88, COM (00) 576.

<sup>18</sup> EU Commission (1999), 'Preparing for implementation of the Kyoto Protocol'. Commission communication to the Council and the Parliament. COM (99) 230 final, in [www.europa.eu.int/comm/env.htm](http://www.europa.eu.int/comm/env.htm).

fundamentally different from the way that the EU and its' member states have organized their environmental policy in recent decades.

For example, the implementation of an emissions trading system requires significant agreement on 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 certain enterprises free of charge or without imposing conditions, it would constitute state aid and would be inconsistent with EU competition rules.<sup>19</sup> For this reason, the Commission seems to have decided that the allocation of quotas will be made to private companies within the same sector—mainly, energy producers or energy-intensive industries.<sup>20</sup>

This does not eliminate, however, the potential danger of damaging the correct functioning of the Internal Market and harming the economic competitiveness of specific national industries, particularly energy-intensive ones. 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 will depend not only on how much a sector emits, but also on the costs it incurs in meeting a target. This would constitute potentially distortional aid that could be contrary to EU competition law.<sup>21</sup> Thus, the precise design of emissions trading within the EU seems to be an essential condition for assuring the Union's future economic competitiveness.

Despite these concerns, the Commission has launched a Proposal for a Framework Directive on an EU Emission System.<sup>22</sup> The Commission's initial proposal depicts its prior consultations with stakeholders. The initial proposal aims to give Member States the capability to distribute emissions allowances for free in energy intensive sectors within the limits or "caps" established by the burden-sharing agreement. The system is designed to preserve its credibility by means of electronically tracking the emissions and imposing penalties on those installations that exceed the limit allowed by granted permits.

The EU Parliament's (EP's) first reading (September 2002) added a few important amendments to this initial proposal. The EP proposal envisaged the need for including all greenhouse gases along with the inclusion of chemical and aluminum industries. Despite considering opt-outs for certain industrial sectors,<sup>23</sup> the EP pointed at the possibility of auctioning at least fifteen percent of total allowances from the very beginning.

In December 2002, the Environmental Council of Ministers (CM) disagreed significantly<sup>24</sup>. First, the CM opposed an initial auctioning of allowances. Second, the CM proposed a delay of auctioning until 2008. Finally, the CM proposed a reduction of auctioned allowances to ten percent. Moreover, they proposed initial opt-outs not only for

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<sup>19</sup> COM (99) 230 final: 15.

<sup>20</sup> COM (00) 87 final: 17. This is the so-called 'upstream' trading system.

<sup>21</sup> COM (00) 87 final: 18.

<sup>22</sup> COM (2001) 581.

<sup>23</sup> These opt-outs would exclude certain sectors from the system, which, nonetheless, would achieve their objectives through other means.

<sup>24</sup> In fact, the CM only accepted 18 of the 73 amendments proposed by the EP in its first reading

**Table 2. Percentage Variations of Greenhouse Gas Emissions in EU, 1990-2000**

	Burden sharing commitment (%) <sup>25</sup>	Variation in CO <sub>2</sub> emissions 1990-2000
Austria	-13	2.7
Belgium	-7.5	6.3
Denmark	-21	-9.8
Finland	0	-4.1
France	0	-1.7
Germany	-21	-19.1
Greece	25	21.2
Ireland	13	24.0
Italy	-6,5	3.9
Luxembourg	-28	-45.1
Netherlands	-6	2.6
Portugal	27	3.1
Spain	15	33.7
Sweden	4	-1.7
UK	-12.5	-12.9
Total EU	-8	-3.5

**SOURCE:** COM (2002) 702 final

<sup>25</sup> The commitment refers to the percentage of change in emissions of CO<sub>2</sub> for 2008 to 2012 relative to the 1990 base year level.

certain sectors but also for certain installations. It is worth noting that, whereas the first proposal may create disincentives for companies to invest in environmentally friendly technologies, the second option might hide forms of state aid.

Parallel to this institutional process, the Commission has recently developed its “Annual Report from the Commission for a monitoring mechanism of community greenhouse gas emissions”,<sup>26</sup> which contains worrying data for the implementation of the EU’s emissions trading system. Whereas overall CO<sub>2</sub> emissions in the Union dropped 0.5 percent from 1990 levels, significant increases occurred in some member states that were allowed to increase their emissions. Indeed, this was the case for Spain, Ireland and Portugal, which have already surpassed their limits established for 2008 (European Commission 2002, 7).<sup>27</sup>

Also emission reductions might be attributed to “one-off factors”, such as German economic restructuring or UK transition from coal to gas energy production. At the same time, energy consumption continues to grow and efficiency improvements remain modest (Meadowcroft 2002). Overall, the EU therefore needs to develop an internal emissions trading proposal that not only will punish high CO<sub>2</sub> emissions, but will also encourage investments in environmentally-efficient energy consumption models. The advantage of the EU’s internal emissions trading proposal stems from the possibility of being able to test it before the global emissions trading system and other flexibility mechanisms start to function. However, disputes among the EP, the Environmental CM and the EU Commission may delay this process.

Within this worrying scenario, the EP and Environmental CM’s views seemed hard to reconcile. The Council of Ministers officially adopted its Common Position regarding the EP’s first reading last March. In its second reading (July 2<sup>nd</sup> 2003), the EP established 17 new amendments to the CM’s common position. Unexpectedly, though, the Commission accepted all these amendments,<sup>28</sup> and so did the Council of Ministers on July 23<sup>rd</sup>, 2003.

Hence, we may assert that there is already a provisional unofficial version of a *Directive establishing a scheme for greenhouse gas emission allowance trading within the Community*.<sup>29</sup> This new scheme,<sup>30</sup> which covers almost all energy-intensive sectors, finally represents an approach that is based upon the National Plans of Allocations for the six-GHG basket. Including these national plans allows the new scheme to strictly observe its overall commitment within the EU bubble. National authorities are in charge of distributing for free 95% of the allowances during the period 2005-2008. Only certain

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<sup>26</sup> COM (2002) 702.

<sup>27</sup> European Commission (2002), “Report from the Commission under Council Decision 93/389/EEC, as amended by Decision 99/2966/EC for a monitoring mechanism of EU greenhouse gas emissions”, COM (2002) 702 final.

<sup>28</sup> COM (2003) 463 final, July 18<sup>th</sup> 2003.

<sup>29</sup> The final text is being subjected to linguistic revisions in the course of producing 11 identical language versions for formal adoption in September.

<sup>30</sup> This explanation tries to briefly summarize the main features of the scheme. It does not intend to be an exhaustive analysis.

installations, rather than whole sectors, are allowed to opt-out from the system until 2007. However, these companies are equally obliged to comply with emissions limits in their respective countries. As well, pooling of installations within the same sector is allowed.

A central administration, as well as national administrations, will monitor transferring, surrender and registration of allowances. The scheme obliges any operator to surrender allowances equal to the total emissions of the installation in each calendar year. Any operator, hence, can be punished with a 40€ fee for each tonne the operator has not surrendered allowances for. This does not exempt them from the obligation to surrender the number of allowances equal to those excess emissions.

Finally, the scheme opens a challenging path by encouraging the conclusion of agreements with third countries listed in Annex B of the Kyoto Protocol to provide for the mutual recognition of allowances.

Last, but not least, the EU has reinforced its leadership commitment to global climate change policy through the promotion of an impressive number of policies and measures to control greenhouse gas emissions, at both the EU and the member state level. Some member states have established national climate change programs (the UK and Denmark being the most significant examples), whereas other have started to promote voluntary agreements with industry (for instance, the Netherlands and Sweden).

The EU, through the European Climate Change Program (ECCP), has tried to identify and develop all the necessary elements of an EU comprehensive strategy to implement the Kyoto commitment. The ECCP goal is to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol. In its first phase, the ECCP has focused on the energy, transport and industry sectors. A working group was set up to analyze flexible mechanisms, energy supply, and energy consumption, transport and industry features related to climate change. The first ECCP report (June 2001) identified 42 possible measures to fight climate change, which could lead to an emission reduction of 664-765 million tons of CO<sub>2</sub> equivalent by 2010, at a cost lower than twenty euros per ton. The second phase of the ECCP (2002-2003) has launched the Commission proposal, a directive on an EU emissions trading system, but also a proposal for a directive on the promotion of biofuels and the proposal of a directive to promote combined heat and power (CHP) biofuels.

The preceding discussion suggests that, unlike the US, the EU has adopted and pursued a serious commitment to CO<sub>2</sub> emission reduction. Regardless of the absence of clear and consensus-based scientific evidence (i.e., the precautionary principle) about the effect of these measures on global warming,<sup>31</sup> the EU has tried to consolidate its global leadership regarding this environmental issue. It has also protected fiercely its Internal Market from future international actions or domestic initiatives. It is thus opposed, on the one hand, to national emissions trading systems and unharmonized climate change measures and, on the other hand, to the creation of a global emissions trading system.

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<sup>31</sup> For a discussion, see Meadowcroft 2002.

## **Conclusions :**

The current study examines the introduction of an interesting and innovative policy instrument in international and domestic environmental policy-making: an emissions trading system. 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, given initial US support for and EU opposition to the emissions trading system.

Nevertheless, these opposing positions on the Kyoto NEPI are less surprising than they might first appear when the analysis centers on the domestic politics at play in both the US and EU. In the US, ratification of the Kyoto Protocol faced certain failure and, therefore, was never submitted to the Senate in 1997. Currently, the prospects for US ratification of the protocol remain limited because the Senate's position is little changed and the Bush administration has made it clear that it does not want to engage in the Kyoto process.

The EU's position is quite different, but also informed by domestic politics. The EU's initial acceptance of the emissions trading system reflects the role of the Dutch Presidency and the gradual and coordinated (and often contentious) efforts of multiple member states to address the international problem of global warming. The Commission's current support for the Kyoto NEPI reflects its commitment to international leadership in the policy area (which conforms to the preferences of several member states) and the internal and less-publicized realization that regulations alone are insufficient to fight climate change.

Given the differences between the current US and EU positions on the Kyoto Protocol, the agreement faces an uncertain future and, at best, a lengthy implementation period. Without a significant change in the US position toward the Kyoto Protocol in general and the emissions trading system in particular, the EU can be expected to remain at the forefront of efforts to implement the Kyoto NEPI. Such a scenario is significant in so far as it allows the EU to determine the contours of the agenda for international policy-making on climate change.

The EU's future success in this international policy area relies heavily on the support of other important countries. Even with the active support of other countries, the EU still faces the daunting task of implementing the international emissions trading system. If the international community (minus the US) is able to agree on the technical modalities for implementing the Kyoto NEPI, the EU and others will face the challenges of enforcing the emissions trading system in a manner that adequately meets its stated objectives. Without sufficient results and/or US participation, the credibility of the Kyoto emissions trading system will be seriously undermined. These insights suggest a promising agenda for future research on the international and domestic politics of the Kyoto emissions trading system. The story is far from complete, and the full policy and political implications of this international regulatory innovation remain to be seen.

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**NOTE:** Those documents that do not have a link have been found in *Eur-lex*.