

## EUROPA RIDING THE HEGEMON?

### Transatlantic Climate Policy

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Prominent and committed supporters of mutually rewarding transatlantic relations have identified climate change as the most important global problem in this century. Counteracting major impacts of climate change requires cooperation among the major emitters of so-called greenhouse gases (GHGs) or agreement on compensation for impacts. Since 2001, the United States has abandoned the international treaty architecture of the Kyoto Protocol (KP), which is presumed to be a first step in the direction of limiting global climate change. Since much of the rest of the world has subscribed to the architecture of the Kyoto Protocol, a major rift has arisen between Europe, a fervent defender of the architecture, and the United States, which considers the protocol unworkable and against its interests. This chapter investigates the history of transatlantic climate relations, the major issues debated, and options for a rapprochement on global climate change.

Excluding the U.S. intervention in Iraq in 2003, climate policy is the most prominent example of a transatlantic rift compared to a history of mostly harmonious relations since World War II. The divide became most prominent with the decision of President George W. Bush in the spring of 2001 to abstain from the Kyoto Protocol. In the wake of this decision, widely criticized by Europeans, climate policy has been elevated to the level of "high politics," a symbol of the underlying disunity in transatlantic relations.

The United States is the largest single emitter of GHGs, that is, gases that

are having an impact on the climate system. In 2000, U.S. emissions accounted for more than one-fifth (20.6 percent) of global emissions. The U.S. share is about one-third higher than that of the world's second largest emitter, the People's Republic of China (14.8 percent) and that of the third ranking, the enlarged EU 25, which has 14.0 percent (Baumert and Pershing 2004, 4).<sup>1</sup> Apart from its role as a major emitter, the United States is also a potential leader in developing technologies to deal with the causes and effects of climate change. These characteristics make U.S. cooperation essential for dealing with global climate change.

The importance of the United States does not diminish the relevance of the European Union. Indeed, the decision of the United States to abandon the Kyoto Protocol galvanized European efforts to unify politically around this issue. Perhaps counterintuitively, the EU is now attempting to exert leadership on global climate change. Can Europa ride the hegemon back to a safe "climate haven"?

### The Transatlantic Foreign Policy Context

The current divergence between Europe and the United States on global climate policy should be judged against the broader background of transatlantic relations since World War II. Through shared goals, resource aggregation, and extensive cooperation, the United States and Western Europe were able to meet the challenges of the Cold War, advance the liberalization of international trade and finance, and promote democracy, pluralism, human rights, and other shared values. Since the events of "9/11" (2001) and "11/9" (1989, the fall of the Berlin Wall), the reshaping of the European political landscape and ensuing changes in the global agenda have severely tested the stability of the transatlantic partnership.

The United States came to the rescue of Europe in two world wars. Following the end of World War II, the United States did not abstain from influencing the political, economic, and military order of the old continent as it did after the first world war. Against the backdrop of the emerging Cold War in the late 1940s, the United States essentially united Western Europe through its first monetary union (the European Payment Union to disburse Marshall Plan funds), stabilization of investment patterns by way of the Marshall Plan itself (to the tune of about 3 percent of U.S. GDP) (Neuss 2003, 7), and continued military presence, the last making sharp deviations from Western forms of democratic political systems very unlikely. This also stabilized political expectations among Western European nations, which had to reconstitute themselves politically after a terrible war. The United States, at various stages, provided continuous support for the uniting of Europe. Conversely, the trans-

atlantic partnership provided political support for the major interventions of the United States on the world political stage.<sup>2</sup>

Until about 1990, transatlantic relations were largely managed by way of multilateral institutions and occasional U.S. unilateral decisions. When some European countries went ahead on their own, for example, France and the UK (with the support of Israel) during the occupation of the Suez Canal in 1956, the United States forced them to retreat. The creation of the European Economic Community and its sister organizations in the 1950s, the creation of NATO, the use of the fixed exchange rate monetary system by way of adjustable U.S. dollar parities until the early 1970s, and the creation of institutions such as the Organization for Economic Cooperation and Development (OECD) and General Agreement on Tariffs and Trade (GATT) all reflected the benign leadership approach of the United States toward Europe. Europe, by itself, was essentially incapable of initiating and maintaining such institutions immediately after World War II. Other events, such as the Vietnam War and the Cuban missile crisis, reflected U.S. supremacy in global decision making within the Western bloc. By winning the Cold War, the United States successfully achieved its most important foreign policy goal.

American support for German reunification in 1990 was also substantial. This process, in turn, served as a catalyst for Europe's contemporary political, economic, and monetary unification. Yet outside its borders, Europe has essentially no vision for creating a world order other than to conceptually aim at multilateralism and the rule of law, predominantly by strengthening the UN system of governance. As a united actor, the EU has mainly been successful in the economic sphere of international trade where it, more precisely, the European Community as an institution, has a mandate on the world stage and is well respected by its counterparts, among them the United States. Major security initiatives, however, all relied on U.S. leadership—even in containing turmoil in Europe, as witnessed in the Balkans.

With the end of the Cold War and the continuing integration of Europe, the transatlantic security alliance lost its preeminence on both sides of the Atlantic. Faced with new, increasingly global challenges, the United States and Europe were often unable to overcome their disunity. Apart from the Iraq war and finding the best strategy to deal with global terrorism, they have taken different stances toward a vast array of topics: climate change, the UN Convention on the Law of the Sea, the landmine and anti-ballistic missile treaties, general approaches to international law, and the politics of economic globalization. In an influential article, Robert Kagan concluded, "on major strategic and international questions today, Americans are from Mars and Europeans

are from Venus: they agree on little and understand one another less and less" (2002b, 3).

## The Transatlantic Policy Challenge of Climate Change

### *The Challenge of Climate Change*

Economic activities—such as the burning of fossil fuels for energy generation or the use of fertilizers and other agricultural practices—produce carbon dioxide, methane, and nitrous oxides, the three major GHGs released by human activities.<sup>3</sup> These anthropogenic emissions add to the preponderant natural GHG level in the atmosphere. It is feared that this anthropogenic addition of GHGs leads to an enhanced "greenhouse effect" and sufficiently disturbs the climate system to cause grave dangers.

The Intergovernmental Panel on Climate Change (IPCC) was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Program (UNEP) to provide scientific yet politically guided expertise. Much of its work revolves around writing comprehensive assessment reports every five years (starting with the 1990 assessment) and more specialized reports in between. The second assessment report (IPCC 1995) concluded prudently that "[t]he balance of evidence suggests a discernible human influence on global climate" (Houghton and IPCC 1996, 22). The third assessment, however, displayed more confidence that this is indeed the case and that a combination of natural and anthropogenic "forcing" of GHG emissions explains the observed temperature record of the past 150 years (Houghton and IPCC 2001, 10–12).

Having corroborated the human impact on the climate system, the IPCC also synthesized the prospects for future climate development. Different emission scenarios were explored for the twenty-first century, and some involve phasing out the fossil fuel-based energy system during this period. Even if this were accomplished, the earth seems committed to a "globally averaged surface temperature [that] is projected to increase by 1.4 to 5.8°C over the period 1990 to 2100" (Houghton and IPCC 2001, 13).

Changes in temperature are not the only impact of climate change. Three other impact domains are illustrative. First, human health may suffer from heat waves, such as that witnessed in France in the summer of 2003. Furthermore, the increase in malaria and dengue infections is a likely consequence of increasing temperatures. Second, climate change may lead to an increase in droughts and water shortages in some regions and more precipitation and flooding in others. Finally, the insurance sector is affected by major climate-related incidents, for example, when hurricanes and tornadoes more frequently

hit insured property. As a consequence, insurance premiums may increase or insurance firms may avoid covering certain climate-related risks.

Climate policy and energy policy are closely intertwined because energy use generates the emissions that climate policy seeks to curb. Projections of future energy use suggest substantial increases of GHGs as the developing countries (especially China) become leaders in emissions sometime during this century. Thus, the challenge will be to curb emissions while keeping the world's economies on a prosperous trajectory.

### *The State of Play in Global Climate Policy*

While a publication in 1896 by the Swedish chemist Svante Arrhenius is considered the first modern conjecture about the anthropogenic greenhouse effect, climate change did not become a political issue until the 1980s. Following a series of conferences held by governments, the WMO, and UNEP from the mid-1980s to 1990, substantial political attention was paid to potential dangers posed by anthropogenic climate change. That attention led to the creation of the IPCC in 1988 and of the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (INC) in late 1990.

In five sessions, the INC managed to compile a draft treaty on time for signature at the UN Conference on Environment and Development (UNCED) at Rio de Janeiro in 1992. The United Nations Framework Convention on Climate Change (UNFCCC) was signed by many countries at UNCED and thereafter; it entered into force on March 21, 1994, and had been ratified by 189 countries by October 6, 2006 (UNFCCC 2004b).

The UNFCCC is a framework convention "plus," that is, it follows the legacy of the regulations on stratospheric ozone depletion and transboundary air pollution by providing a general document that lays the foundations for future regulatory efforts. In particular, it stipulates that the "ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (United Nations 1992, art. 2).<sup>4</sup> In addition to that ultimate goal, the UNFCCC advised industrialized countries to bring their year 2000 emissions of GHGs back to 1990 levels (UNFCCC 1992, art. 4[2a]), but the careful wording avoids setting clear obligations that could become the object of noncompliance procedures. Many signatories failed to freeze emissions, but as a group they managed to reach this goal. Among the major emitters, the performance of the EU during 1990–2000 has been particularly encouraging.<sup>5</sup>

Following the principle of "common but differentiated responsibilities,"

the UNFCCC has set the path for industrialized countries to exercise leadership in reducing GHGs, to be followed by developing countries. While the former countries have largely created anthropogenic climate change by their economic development path, the latter wish not to preclude their opportunity to become wealthier soon. Therefore, the UNFCCC includes a range of obligations that are more demanding for industrialized as opposed to developing countries (e.g., financial assistance in favor of developing countries and a transfer of technology and knowledge). In essence, the global climate regime combines environmental with development goals—a more demanding objective than a solely environmental agreement.

While the UNFCCC set an ultimate goal and an institutional architecture, the first Conference of the Parties (COP) at Berlin in 1995 decided to begin negotiations on a protocol to the Convention that would lead to concrete and binding emission reductions in the industrialized countries (the "Berlin Mandate"). Subsequent rounds of negotiations resulted in the Kyoto Protocol (1997). In contrast to the UNFCCC, this treaty is comparatively focused. For a range of industrialized countries, it stipulates legally binding emission reduction targets for six GHGs and groups of GHGs during the period 2008–2012. These reduction targets appear in table 8.1.

The fifteen members of the European Union and some other European countries accepted an 8 percent reduction goal for their average 2008–2012 GHG emissions compared to their emissions in 1990; the United States, a 7 percent reduction; and Japan, a 6 percent reduction. The Russian Federation was allowed to keep its 1990 emissions level, while, for example, Norway and Australia were granted an increase of their emissions by 1 and 8 percent, respectively.

To achieve such emission reductions in an efficient way, countries are allowed to use specific mechanisms, including emissions trading (ET), joint implementation (JI), and the Clean Development Mechanism (CDM). In ET, a country with more emission rights than it anticipates using can sell this surplus to countries that would otherwise exceed their permitted amounts. JI and the CDM are quite similar to each other yet affect different countries. In both, an investor (country or enterprise) invests in an emission-reduction project abroad, the reductions are verified, and in exchange for the investment, the investor receives GHG credits, that is, it can now emit the total of its allowances under the Kyoto Protocol plus these credits. The difference between JI and CDM is that the host country of the emission-reduction project is an industrialized country for JI and a developing country for CDM. In CDM, a contribution is also made to an adaptation fund to help developing countries deal with climate change.

Table 8.1. Changes in GHG emissions for UNFCCC Annex I parties, 1990–2004

Party	Total GHG emissions without LULUCF (million tons CO <sub>2</sub> equivalent)			Changes in emissions (%)		Emission reduction target under the Kyoto Protocol <sup>1,2</sup>
	1990	2000	2004	1990–2004	2000–2004	(%)
Australia	423.1	504.2	529.2	25.1	5.0	– <sup>3</sup>
Austria	78.9	81.5	91.3	15.7	12.4	–8(–15)
Belarus	127.4	69.8	74.4	–41.6	6.6	no target yet
Belgium	145.8	147.4	147.9	1.4	0.3	–8(–7.5)
Bulgaria	132.3	64.3	67.5	–49.0	5.1	–8
Canada	598.9	725.0	758.1	26.6	4.6	–6
Croatia	31.1	25.3	29.4	–5.4	16.5	– <sup>3</sup>
Czech Republic	196.2	149.2	147.1	–25.0	–1.4	–8
Denmark	70.4	69.6	69.6	–1.1	0.1	–8(–21)
Estonia	43.5	19.7	21.3	–51.0	8.4	–8
European Community	4252.5	4129.3	4228.0	–0.6	2.4	–8
Finland	71.1	70.0	81.4	14.5	16.4	–8(0)
France	567.1	561.4	562.6	–0.8	0.2	–8(0)
Germany	1226.3	1022.8	1015.3	–17.2	–0.7	–8(–21)
Greece	108.7	131.8	137.6	26.6	4.5	–8(+25)
Hungary	123.1	81.9	83.9	–31.8	2.5	–6
Iceland	3.28	3.54	3.11	–5.0	–12.2	+10
Ireland	55.6	68.7	68.5	23.1	–0.4	–8(+13)
Italy	519.6	554.6	582.5	12.1	5.0	–8(–6.5)
Japan	1272.1	1345.5	1355.2	6.5	0.7	–6
Latvia	25.9	9.9	10.7	–58.5	8.2	–8
Liechtenstein	0.229	0.256	0.271	18.5	6.0	–8
Lithuania	50.9	20.8	20.2	–60.4	–3.1	–8
Luxembourg	12.7	9.7	12.7	0.3	31.3	–8(–28)
Monaco	0.108	0.117	0.104	–3.1	–11.0	–8
Netherlands	213.0	214.4	218.1	2.4	1.7	–8(–6)
New Zealand	61.9	70.3	75.1	21.3	6.8	0
Norway	49.8	53.5	54.9	10.3	2.7	+1
Poland	564.4	386.2	388.1	–31.2	0.5	–6
Portugal	60.0	82.2	84.5	41.0	2.9	–8(+27)
Romania	262.3	131.8	154.6	–41.0	17.3	–8
Russian Federation	2974.9	1944.8	2024.2	–32.0	4.1	0
Slovakia	73.4	49.4	51.0	–30.4	3.3	–8
Slovenia	20.2	18.8	20.1	–0.8	6.6	–8
Spain	287.2	384.2	427.9	49.0	11.4	–8(+15)

continued

Table 8.1. continued

Party	Total GHG emissions without LULUCF (million tons CO <sub>2</sub> equivalent)			Changes in emissions (%)		Emission reduction target under the Kyoto Protocol <sup>1,2</sup>
	1990	2000	2004	1990–2004	2000–2004	(%)
Sweden	72.4	68.4	69.9	–3.5	2.1	–8(+4)
Switzerland	52.8	51.7	53.0	0.4	2.6	–8
Turkey	170.2	278.9	293.8	72.6	5.3	– <sup>3</sup>
Ukraine	925.4	395.1	413.4	–55.3	4.6	0
United Kingdom	776.1	672.2	665.3	–14.3	–1.0	–8(–12.5)
United States	6103.3	6975.9	7067.6	15.8	1.3	– <sup>3</sup>
Annex I EIT parties	5551.0	3366.9	3506.0	–36.8	4.1	–
Annex I non-EIT parties	13000.5	14147.7	14425.6	11.0	2.0	–
All Annex I parties to the Convention	18551.5	17514.6	17931.6	–3.3	2.4	–
Annex I Kyoto Protocol parties	11823.8	9730.3	10011.5	–15.3	2.9	–5

Source: [http://unfccc.int/files/essential\\_background/background\\_publications\\_htmlpdf/application/pdf/ghg\\_table\\_06.pdf](http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/ghg_table_06.pdf) (Nov. 12, 2006).

<sup>1</sup>The national reduction targets as per the “burden-sharing” agreement of the European Community are shown in parentheses.

<sup>2</sup>The national reduction targets relate to the first commitment period under the Kyoto Protocol, which is from 2008 to 2012.

<sup>3</sup>A party to the Climate Change Convention but not a party to the Kyoto Protocol.

Note: LULUCF refers to land use, land use change, and forestry. EIT refers to countries in transition from planned to market economies. Base year data (under the Climate Change Convention) are used here instead of 1990 data (as per COP decisions 9/CP.2 and 11/CP.4) for Bulgaria (1988), Hungary (average of 1985–1987), Poland (1988), Romania (1989) and Slovenia (1986).

Furthermore, countries can form bubbles, that is, be considered as one emission air space and agree on common liability, so that it does not matter which actually undertakes the emission reductions as long as the aggregate emissions meet the combined obligations of the bubble’s countries. The EU has formed such a bubble for its member countries.

The Kyoto Protocol was concluded in 1997, yet only in late 2001 did countries agree on how to interpret the treaty in more detail. During the interim, President George W. Bush’s national security advisor, Condoleezza Rice, declared in spring 2001 that “Kyoto is dead” (quoted in Grubb 2001, 9). Against this backdrop, the Marrakech Accords of November 2001—following failed negotiations in The Hague in late 2000 and intermediate compromises at Bonn in mid-2001—were an attempt under EU leadership to salvage the Kyoto Pro-

tol. They finalized a compliance mechanism with a facilitative and an enforcement branch, made all different types of GHG emission reduction efforts interchangeable currency, and granted generous allowances for the sequestration (binding) of carbon by forest resources and other types of so-called terrestrial sinks.

To take effect, at least fifty-five countries accounting for at least 55 percent of industrialized countries' emissions of CO<sub>2</sub> had to ratify the Kyoto Protocol. After the United States refused to ratify the protocol, Russia (due to the size of its emissions) became the pivotal country to determine its fate. After years of ambiguity about its ultimate decision, Russia ratified the Kyoto Protocol in late 2004, which allowed the treaty to become legally binding on its parties on February 16, 2005. At that time, only four industrialized countries—Australia, Liechtenstein, Monaco, and the United States—had not yet ratified the Kyoto Protocol. Australia and the United States had stated that they did not plan to do so (UNFCCC 2004a).

### *Key Transatlantic Disagreements*

Since climate change appeared on the international agenda, the United States and Europe have each promoted different views about several aspects of climate policy, including assessment of the state-of-the-art of science, the necessity and magnitude of binding emission reduction targets, the choice of instruments as well as their implementation, and the inclusiveness of the international regime.<sup>6</sup>

First, the EU takes the IPCC findings as guidelines for action in favor of mitigation whereas the Bush administration has been rather reluctant to accept the scientific mainstream. Second, the United States has opposed binding targets during negotiations, while Europe has promoted them. The United States ultimately agreed to binding emission targets in the Kyoto Protocol, only to revoke that pledge in 2001. Third, even if policy is deemed necessary, there are strong differences in the basic approach. For a long time Europeans preferred direct regulation (coded as policy and measures), which allows for the fine-tuning of government intervention in industrial activity. The United States has preferred market-driven systems such as free and unlimited emissions trading. It took the EU many years to appreciate market-oriented instruments like ET and CDM in order to reduce the burden of adjustment. Yet the EU also still believes in political and economic planning for interventions—as reflected in its past emission reductions, its plans for further cuts, and its support for the institutional structure of the Kyoto Protocol. By contrast, the United States has absolved itself from offering an alternative architecture to govern anthropogenic emissions of GHGs and relies mostly on domestic, bila-

teral, and multilateral research and technology programs, as well as voluntary emission cuts by U.S. companies. Fourth, the EU has supported the idea that mitigation should begin with the advanced, industrialized countries, while the United States has pushed for the inclusion of developing countries from the outset.

As climate change has advanced on the international political agenda, the debates about it in Europe and the United States have been conducted in very different ways. In the United States, there is no consensus that binding emission reductions are necessary, whereas a broad cross-party consensus exists in much of Europe. In Germany, for example, the Bundestag unanimously backed the Kyoto Protocol. Likewise, in the United Kingdom, both Labour and Conservative governments have endorsed ambitious climate change policies domestically and internationally. By contrast, the United States has yet to achieve congressional majorities favoring emissions control or an executive branch firmly committed to the Kyoto accord or any other binding global architecture to control the dangers of climate change.

The EU still believes that the top-down architecture offered by the Kyoto Protocol is “the only game in town. It is the best we have” (Jan Pronk, chair of UNFCCC COP-6, at The Hague).<sup>7</sup> More precisely, enthusiasm varies among EU members in support of the protocol and relevant internal policies. Yet this should not obscure the fact that, at the aggregate level, the EU remains unified in support of the KP architecture as well as serious efforts at compliance with it.

### *EU Climate Policy*

Some key aspects of the EU's climate strategy are its burden-sharing system and current efforts at compliance, the emissions trading system, and renewable energy goals. The EU's bubble, as part of the burden-sharing system, advocates a common obligation externally while having internally differentiated obligations, resulting from negotiations among member countries. As a group, the EU agreed to a 15 percent emission reduction position before the global negotiations at Kyoto. The internal distribution formula, however, covering only 10 percent, calls into question whether the EU was ever credibly prepared to reduce emissions by 15 percent. Once the EU had agreed to an 8 percent emission reduction at Kyoto, the original agreement was quickly reopened and internal obligations adjusted downward without hesitation. In this process, it became obvious that the late developers in the EU could not retain their generous allowances in the final allocation scheme (Schröder et al. 2002, 129).

While the EU at large succeeded in honoring the nonbinding obligations of the UNFCCC to limit its 2000 emissions to those of 1990, it barely man-

aged to reduce emissions between 1990 and 2004 (see table 8.1). Compared to a linear reduction benchmark for reducing GHG emissions between 1990 and the average Kyoto commitment year of 2010, the EU falls short of being unambiguously on track by way of internally generated emission reductions.<sup>8</sup> As could be expected within a heterogeneous union, compliance records actually vary substantially. Both Germany and the UK—which shoulder most of the net burden of emission reductions—as well as Sweden and France, are well on their way to complying with their EU obligations. Spain, Austria, Portugal, and Finland currently seem to be faltering with respect to achieving their European emission reduction goals. Current and planned policies for domestic emission reductions, plus planned purchases of GHG permits through the Kyoto Protocol mechanisms by Austria, Belgium, Denmark, Finland, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain, are projected to allow the EU 15 to achieve its 8 percent reductions goal (European Environment Agency 2006).

The EU—a latecomer to market-based regulation—passed an EU Directive in 2003 on CO<sub>2</sub> emissions trading among roughly twelve thousand companies. The directive covers about half of the EU's CO<sub>2</sub> emissions (European Commission 2004). In essence, the directive uses cost differences in CO<sub>2</sub> abatement among EU member countries as an efficient way to reduce the costs of compliance with the Kyoto Protocol. The 2005–2007 period serves as a time for easing the way toward achieving real accomplishments in the 2008–2012 period. It thus parallels potential global efforts at emissions trading (e.g., Japan with Russia). In the EU, long-standing member countries had until March 2004 to divide up their national allocations. Not all countries managed to submit their national allocation plans to the European Commission on time; some even had to fear infringement procedures (European Commission 2004). What at first glance looked like submitting plans for the simple implementation of a previously agreed upon EU Directive actually reflected major domestic disputes between governments and industry over who gained what, who could keep entitlements (e.g., old versus new industries), and who governed the environment (industry ministries or environment ministries). Plans in some member countries were politically astute because they used the lack of clarity over the ratification of the Kyoto Protocol by Russia as an excuse to initially over-allocate emissions nationally. Nevertheless, by 2005, the European Commission had approved all twenty-five European allocation plans.

The EU and some of its member countries have pushed renewable energy as an alternative to the carbon economy. Unlike the United States, the EU and some member countries try to set specific goals. There is a goal for making renewable energy 12 percent of overall energy consumption in the EU 15

by 2010 and 22 percent for the EU 25, but the European Commission does not expect the EU to meet these goals (European Environment Agency 2006). Moreover, the EU was unable to enter the Bonn Renewables Conference of 2004, a pet project of the then-environment minister in Germany. It followed the Johannesburg summit in 2002 and its more concrete results and had a longer-term numerical goal of its own. By 2010 the German government plans to double its share of electricity from renewable energy sources from a low level of 6.3 percent in 2000 and reach at least 20 percent by 2020.<sup>9</sup> In 2003 the UK released an energy white paper in which it announced that it “should put itself on a path towards a reduction in carbon dioxide emissions of some 60% from current levels by about 2050” (UK Dept. Trade and Energy 2003, 8). Renewable energy sources are destined to play an important role in this long-term scheme, with a numerical short-term goal of 10 percent of electricity by 2010 (UK Dept. Trade and Energy 2003, 12). France has a national target of 75 percent emission reductions by 2050—which would necessitate massive use of renewables.<sup>10</sup> Whether these goals are politically feasible remains to be seen. The EU has also set up a range of programs to assist in meeting its renewable energy goals (Gupta and Ringius 2001).

In addition to these three policy arenas sketched briefly, the EU has a monitoring system as well as other support programs for European climate policy. Whether the combination of all programs is sufficient for achieving the Kyoto goals is debatable; a report by the European Environment Agency suggests that the EU might just be able to reach its 8 percent emission reduction goals under certain circumstances (European Environment Agency 2006, 5).

### *U.S. Climate Policy*

When George W. Bush declared shortly after his inauguration as president of the United States in 2001 that his country was no longer bound by the Kyoto Protocol, it came as a shock to most in the international community. One should note, however, that the KP never had a chance of ratification under the Clinton administration either.

Calls for the agreement to be “dead on arrival” could already be heard at Kyoto in 1997. Half a year before the negotiations, the U.S. Senate adopted in a bipartisan vote the so-called Byrd-Hagel Resolution (U.S. Congress, Senate 1997). It set the tone for (non)ratification of any future international commitment on climate change by stipulating that the United States should not sign any treaty that does not “include commitments for countries with developing economies” or would “result in serious harm to the economy of the United States.”

After passage of the Byrd-Hagel Resolution, the Clinton administration

essentially had to downgrade its initial reduction goals and submit a negotiation position paper that was clearly "based more on political pragmatism than environmental purity."<sup>11</sup> After dramatic negotiations in Kyoto, the U.S. delegation finally accepted both higher emission reduction goals and an exclusion of developing countries from binding commitments. Governmental gridlock between the U.S. executive and legislative branches became inescapable. Accordingly, when the U.S. government finally signed the Kyoto Protocol at the fourth UNFCCC Conference of the Parties (COP-4) in 1998, the accompanying Senate delegation reaffirmed at an ad hoc press conference that the Senate would not support it. Subsequently, the Clinton administration never put all its political capital behind the treaty, despite the fact that it continued to officially support it. The protocol was never forwarded to the Senate for a vote.

American domestic climate policy has gone back and forth for two decades. In both Clinton terms, the president initiated programs, but Congress more often than not blocked their implementation. In Clinton's second term, Congress even tried to weaken or abolish earlier measures, repeatedly accusing the administration of implementing Kyoto through the back door. For example, House Resolution 4194 for fiscal year 1999 explicitly prohibited any measures aimed at the Kyoto goals and even put a halt to any publicly financed information campaigns relating to climate change.

New changes arrived with the inauguration of George W. Bush. Opposing Clinton's standpoint, the new president argued that the consequences of global climate change remained uncertain. He echoed the congressional position of the late 1990s that developing countries like China ought not to be free of substantive emission reductions. The Kyoto targets were "unrealistic, . . . arbitrary and not based upon science," so the protocol was "fatally flawed in fundamental ways" (U.S. White House, Office of the Press Secretary 2001). One should note, however, that the United States under Bush has continued to support the general goals of the UNFCCC.

At the time of writing, the Bush administration has not come up with any effective alternative to the Kyoto approach or with decisive domestic measures. Some specifics are illustrative. On February 14, 2002, President Bush announced his Global Climate Change Initiative. Intended to "recognize [U.S.] international responsibilities," it is a legally nonbinding proposal to reduce the greenhouse gas intensity of the U.S. economy (i.e., emissions per unit of GDP) 18 percent by 2012. The initiative claims that "sustained economic growth is the solution, not the problem" (U.S. White House 2002). Its goal will be reached by agreements with industry on voluntary emission reductions. The National Climate Change Technology Initiative of June 11, 2001, had already

put technology research and development (R&D), including CO<sub>2</sub> sequestration, at the forefront of the administration's climate policy. Bush's approach includes tax reductions for those reducing emissions as well as government-funded subsidies for R&D (Fay 2002).

At first glance, an 18 percent energy intensity reduction goal looks ambitious. Experts point out, however, that this number is roughly in line with current trends in decarbonizing the economy, that is, the goal might be reached without any additional measures as a result of energy efficiency improvements and ongoing structural changes in the economy. In absolute terms, U.S. emissions are expected to rise by about 12 percent by 2012—resulting in levels that are more than 30 percent higher than the U.S. Kyoto Protocol commitments (Pew Center on Global Climate Change 2002). Therefore, Bush's program contradicts his announcement that the United States would play "a leadership role on the issue of climate change" (U.S. White House, Office of the Press Secretary 2001).

Most interestingly with regard to the reversal of the Clinton administration's environmental rhetoric, Congress during the Bush presidency has tried to initiate stronger climate policy measures, often thwarted by the White House. There have been an impressive number of climate policy initiatives in both houses of the U.S. Congress in recent years.<sup>12</sup> The most prominent and far-reaching bill was introduced in the Senate on January 8, 2003, by Joseph Lieberman and John McCain. Their Climate Stewardship bill included a national cap on U.S. greenhouse gas emissions and trading of emission rights. The bill, however, was defeated in the Senate, 43 to 55. On the positive side, this result was better than even its proponents expected. Against a strong coalition of climate skeptics in the executive and legislative branches, key elected officials such as Senate Foreign Relations Committee Chair Richard Lugar changed sides and supported the bill. In 2005, the bill was rejected again. The Senate instead adopted a nonbinding resolution by a vote of 53 to 44 calling for a "national program of mandatory market-based limits and incentives on greenhouse gases" (U.S. Congress, Senate 2005), at least putting the Senate on record for the first time with a demand for mandatory action on GHGs. McCain and Lieberman announced plans to reintroduce their bill. And the fact that other aspirants for the 2008 presidential election have introduced climate change legislation indicates increasing support in the United States for ameliorative action.

European observers tend to reduce U.S. policy to the actions of the federal government. Yet states such as California, New Jersey, and those in New England have been at the forefront of pushing for climate policy initiatives. California State Assembly Bill No. 1493 (passed on July 22, 2002) calls for sub-

stantive reduction of CO<sub>2</sub> emissions from vehicles. The most active states are also cooperating with nonstate actors, such as private companies and NGOs, on effective mechanisms for ameliorating climate problems (Rabe 2002). Some states have even tried to interfere with the national government's international policy. For example, California's Senate Joint Resolution 20 (September 26, 2002) stressed the need for the United States to ratify the Kyoto Protocol. In their Regional Greenhouse Gas Initiative (RGGI), northeastern states plus the eastern Canadian provinces have called for a GHG emission inventory as basis for a cap and trade scheme similar to that of the EU.<sup>15</sup> In August 2006 Governor Arnold Schwarzenegger of California and leaders of the Democratic-controlled state assembly announced an agreement that imposes the most sweeping controls on CO<sub>2</sub> in the nation. It calls for a 25 percent reduction in California's emissions by 2020 compared to business-as-usual projections (Barringer 2006).

Clearly, local and regional initiatives should be seen as valuable components but not substitutes for effective (inter)national climate policy. Altogether, the United States remained the climate policy outsider, just as it was in 1993 (Pfaff 1992). It also remains divided internally—a division that has to date resulted in the absence of significant domestic action (Riggs 2004).

### Europa Riding the Hegemon?

Over the course of the climate regime negotiations, the European Union has emerged as a leading player. Yet Europe's leadership position has long been undermined by internal divergences. At the Kyoto negotiations, for example, the United States was still able to employ "salami tactics" with the EU, and EU ministers supposedly yelled at each other rather than prepare themselves better for the negotiations. Ultimately, the Kyoto wrestling match in 1997 had no clear winner. The United States managed to largely shape the protocol's instruments according to its preferences yet had to agree to emission reductions and was unable to have developing countries included in the accord. The EU—in coalition with its pro-Kyoto partners in the developed, developing, and NGO worlds—was able to modify the United States' preferred course of action.

With the near collapse of UN climate negotiations in 2000 at The Hague, it became apparent that the EU needed to establish a more outward and forward-looking strategy. Rather than mainly focusing on internal efforts, it had to invest more in global diplomacy, including stronger ties with developing countries. The EU had always been supportive of the principle of common but differentiated responsibilities, which enables developing countries to expect industrialized countries to be first movers in climate change activities.

Now, it forged a tacit coalition with developing countries to limit softening of the Kyoto obligations, conveniently lubricated by support for funds to assist them. For example, in coalition with other developed countries, the EU has offered €450 million annually for climate-related measures.

When President Bush withdrew the United States from the Kyoto Protocol, the question arose of who could and would lead global climate policy formation. A president abstaining from a treaty signed by his predecessor is unparalleled in environmental diplomacy. Equally embarrassing to Europeans was the fact that Bush presented his domestic program only weeks after Christine Whitman, then head of the U.S. Environmental Protection Agency, acting on National Security Advisor Condoleezza Rice's assurances, promised America's European allies that the president would honor his presidential campaign pledge in 2000 to set mandatory reduction targets for CO<sub>2</sub> emissions from power plants (Semple 2005)—which his energy intensity approach failed to do.

The EU then changed its strategy from modifying to resisting. Instead of accepting the death of Kyoto that the U.S. administration had unilaterally announced, it agreed to take the lead in continuing the UN plan. It managed to gain external capacity by not only concentrating on internal policy cohesion but also preparing for negotiating as a union (Grubb 2001). To the surprise of many, further negotiations not only survived the U.S. retreat but resulted in the Marrakech Accords, which serve as the executive rules for the Kyoto Protocol.

Many believe that the Bush administration had hoped to kill off Kyoto by opposing it (Shah 2004). Since America's withdrawal, Europe has been at the forefront of those calling on the United States to rejoin or, at the very least, not to oppose further development and entry-into-force of the Kyoto Protocol. This was clearly the message of the Gothenburg summit in 2003 and the whirlwind diplomacy the EU initiated thereafter. At least at the surface of public diplomacy, the EU has been successful with the latter. While being very clear about its reluctance to rejoin, the United States repeatedly announced that it would not try to force others to leave the protocol.

EU diplomacy followed largely what Herman Ott and Sebastian Oberthür (2001) called for in the "EU Leadership Initiative on Climate Change," namely, early ratification of the Kyoto Protocol, steps at domestic implementation, and engagement of the developing countries. On all three points, the EU scores well. It ratified early, nationally as well as at the Commission level, in 2002. Internally, the EU has taken a range of steps to reduce emissions and establish an EU-wide CO<sub>2</sub> trading regime. Finally, it has tried to engage developing countries diplomatically and financially, in part by member countries offering ten-



ders for Clean Development Mechanism projects and establishing a dialogue on their engagement in a second commitment period of the Kyoto Protocol.<sup>14</sup> In so doing, it has also maintained considerable pressure on the United States to effectively contribute to global climate change mitigation.

Given U.S. opposition, substantial diplomatic efforts were directed at Moscow because Russia's ratification decision would decide the fate of the Kyoto Protocol. Russia was quite aware of its pivotal role and managed to derive substantial concessions from the EU on so-called sinks in the Marrakech Accords.<sup>15</sup> In addition to UN agencies, European sponsors supported the World Climate Change Conference (WCCC) that took place in Moscow in fall 2005. Although this summit did not result in a firm and unambiguous Russian commitment to ratify the protocol, the conference did display a strong new coalition of European and Canadian advocates supported by other lobbying groups, among them U.S. NGOs. Subsequently, the EU continued its pressure on Russia. As part of its strategy, it did not shy away from linking climate policy with other topics of great importance to Russia such as energy policy and Russia's application for WTO membership. In the end, these efforts sufficed. Together with its "climate allies," most prominently Canada, Japan, a vast majority of developing countries, relevant UN bodies, and environmental NGOs, the EU celebrated Russian ratification as an important diplomatic success and a milestone in saving the earth's climate. During this critical time period, there were constant rumors that American representatives from the private and public sectors were trying to keep Russia from ratifying. If those rumors were true, the EU won the Russian ratification tug-of-war.

At the G-8 Gleneagles summit in 2005, UK Prime Minister Tony Blair made climate change a key issue. The main outcome was an agreement by the G-8 and major developing countries with significant energy needs to launch a "Dialogue on Climate Change, Clean Energy, and Sustainable Development." Once again a European leader was able to force the U.S. president to fight for his credibility: "I've also told our friends in Europe that Kyoto would have wrecked our economy. I don't see how you can be president of the United States and agree to an agreement that would have put a lot of people out of work" (U.S. White House, Office of the Press Secretary 2005). The continuation of the G-8 dialogue will keep climate change and U.S. climate policy on the agenda (Ochs 2005).

More recently, the United States, together with Australia, China, India, Japan, and the Republic of Korea, launched the Asia-Pacific Partnership on Clean Development and Climate. According to U.S. Secretary of Energy Samuel Bodman, its aim is to "work together with the private sector . . . to take concrete action to meet energy and environment needs while securing a more

prosperous future for our citizens" (Kelly 2006). While the launch of the partnership came as a surprise to the EU, the United States was quick to state that the initiative "will complement, but not replace, the Kyoto Protocol" (U.S. Department of State 2005). This itself might be an indicator of the strength that the UN process and its primary leader have gained.

Besides international alliance-building, *de facto* partnerships with state and nonstate actors, and direct engagement of the U.S. government, the EU has cautiously started to help increase U.S. public pressure on the government and has thus joined forces with powerful domestic actors. EU representatives often have openly applauded initiatives on the U.S. state level, which points to the policy vacuum the federal government has left. The EU has collaborated on policy, for example, with regard to the Regional Greenhouse Gas Initiative emission trading plan in the northeastern U.S. states. Still somewhat secretly, European Commission officials have discussed the possibility of linkage with the EU emissions trading system to allow emission permits to be traded across the Atlantic.<sup>16</sup> In 2006, Prime Minister Blair and Governor Schwarzenegger signed an agreement to do cooperative research on new clean-energy technologies. For their part, U.S. actors point to EU positions and actions in demanding a more proactive stance by the U.S. federal government.

Can EU-Europe ride the hegemon? Europa has certainly taken a ride, but any observer of rodeos knows that the rider will ultimately discontinue his or her ride more or less gracefully. If the United States proves to be a youthful bull, Europa has no chance to solve the problem on its own. In the long run the United States has to be willing to contribute to the solution. If the U.S. leadership turns out to be a wild horse ready for domestication, chances are that the EU can succeed in the long run. This seems the more probable scenario since the U.S. public—the rodeo spectators, if you will—increasingly seems to favor the rider domesticating the bull. Despite the dramatic discrepancy between actual U.S. emissions and the Kyoto target—reaching the target emission level would now indeed involve extensive adjustment of the economy—in 2005 a plurality favored rejoining the treaty.<sup>17</sup>

In essence, while Europe has seized the opportunity to advance global climate policy without the United States, the EU clearly prefers to have the United States included in some future policy architecture for tackling the challenge. The EU is not yet courageous enough to embark on long-term pro-climate brinkmanship on its own. Its weak foreign policy performance may be improving over time, but the EU has not really mounted a fundamental challenge to its erstwhile closest partner (trade policy is a notable exception).<sup>18</sup> The EU, however, has successfully resisted hegemonic U.S. dominance over climate change policy, adhered to its own preferences, taken over international

leadership, and, through a wide repertoire of strategies employed in different arenas, been able to modify U.S. action. A successful continuation on this path would be full implementation of the Kyoto Protocol ratifiers' commitments. For some years to come, the entry into force of the protocol appears to vindicate the EU's position, but it is unclear whether the treaty architecture in its present form will provide the backbone for a successful long-term strategy to limit the dangers posed by climate change.

Most importantly, the EU tries to build coalitions of the willing within universal membership institutions. For climate change, it has put all its eggs in one basket, the "Kyoto basket." Nevertheless, it is unlikely to be in a position to offer the U.S. a side-payment large enough to make it play along in the only game in town. Accordingly, the EU will either have to develop a set of Kyoto modifications that the United States cannot decline to accept or be constrained to wait and see if domestic political pressure in the United States will increase to the point where Washington can no longer refuse to cooperate.

#### Elements of a Transatlantic Rapprochement on Global Climate Change

Since Europe cannot simply dominate the United States and determine its policy, given U.S. material sources and political strength, we have to explore the chances of the EU reengaging the United States by means of more sophisticated diplomacy. What might future transatlantic relations on global climate change look like? We consider three scenarios: continued EU leadership in, and the United States refraining from participation in, global climate policy; selective linkage of decentralized policies, for example, emissions trading systems; and active transatlantic reengagement on global climate policy.

Given U.S. hostility to the Kyoto Protocol, it may abstain from any global climate policy approach in the years ahead. Reopening negotiations for a U.S. return would inevitably mean reducing the protocol's commitments. The resulting "Kyoto light" would mean a serious loss of credibility for the EU and would therefore be unacceptable. It is now commonly acknowledged that Kyoto is only a first step in preventing dangerous climate change. Thus, Europe will attempt to demonstrate that GHG emission reductions can be achieved without too much harm to economic growth and without relying on the functioning of the U.S. political process, since many participants in the Kyoto Protocol already realize that the United States is generally isolated by the fact that it has not suggested any specific long-term climate strategy. In this scenario, Europe will most likely push for U.S. participation in a post-2012 international climate agreement.

Linkage of selective domestic policies is another possible scenario. Various

U.S. states increasingly press for a more ameliorative national policy. Historically, the United States most often came up with domestic environmental legislation first and only later tried to internationalize such domestic regulation. Also, federal environmental legislation was often anticipated by regulation at the state level. Current state-level climate policy may ultimately beat the status quo by pushing the federal government to cap GHG emissions. Should a national emissions cap materialize, the United States is likely to use market-based instruments, such as a national emissions trading system, to lower the costs of compliance with domestic law (Victor 2004). Eventually, there may be opportunities to link decentralized emissions trading systems by internationally harmonizing rules of trade and verifying offsets. This would parallel the successful history of international trade in goods and services. Emissions trading—invented by Americans but first implemented in European climate policy—would then become *the* transatlantic climate mitigation tool.

A final scenario features a structured attempt at reinvigorating the transatlantic partnership by way of a joint climate policy. Three possible elements would be cooperating on technology R&D, agreeing on a long-term target, and establishing a liability fund for climate-related impacts.<sup>19</sup>

Achieving limits on GHG emissions at acceptable social costs will have to involve far-reaching technological change in the energy, transportation, and other sectors. This seems to be one of the few points about climate change on which the United States and Europe agree. Cooperation to promote development of climate-friendly technologies thus appears to be a promising focus for rebuilding a transatlantic dialogue on global climate change. There are, however, disagreements on the best way to promote technological change. The "technology push" view of the Bush administration puts primary emphasis on the development of low-GHG technologies, typically through publicly funded R&D programs. By contrast, the EU's "market pull" view holds that technological change originates from technology-based regulatory limits or GHG emission caps (Grubb and Stewart 2004).

Overall, choice between a target-based regime and a technology-based policy presents a false dichotomy. Investing in technology will not work efficiently enough if there is no clear target justifying those investments. Conversely, technology programs can vastly improve the acceptability and "implementability" of politically administered reduction targets (Grubb and Stewart 2004). Technology and market regulation are then two sides of the same coin. If the IPCC findings are reinforced in the coming years, and the ineffectiveness of the U.S. climate strategy broadly recognized, a more forthcoming U.S. approach to market regulation is not improbable. Likewise, the EU might face increasing pressure to assist its businesses in their development

of climate-friendly technology to enable them to reach the politically mandated emission goals.

Even if we will not see such basic rapprochement anytime soon, there are alternatives for transatlantic R&D cooperation. A number of prominent voices have called for joint massive investment in the development of climate-friendly energy production and energy efficiency technologies. On the upper end, such an enterprise would be comparable to the Apollo program that successfully sent humans to the moon. On a more modest scale, investment could focus on partial solutions, such as capture and storage of GHG emissions, development of emission-free coal-fired energy production plants, and hydrogen and solar technology.

A second starting point for renewed transatlantic climate cooperation would be an intensified debate on the long-term target of climate policy. The UNFCCC should frame the debate. Article 2 of the Convention describes its ultimate objective as the avoidance of "dangerous anthropogenic interference" with the climate system. Transatlantic discussion could focus on how to operationalize that. It could even try to do so in terms of a *quantified* long-term target. Friedemann Müller and Michael Oppenheimer (2004) point out that short-term emission goals considered in isolation provide no road map for the ultimate response to climate change. Emission growth can be decreased with existing technology, but a time frame that covers several decades is needed to develop and implement new technologies that substantially reduce emissions. Short-term international emission objectives, like those embodied in the Kyoto Protocol, are determined fundamentally by political and economic feasibility. A long-term global target, to the contrary, is likely to be determined by an assessment of environmental risks. Appropriate quantification of what can be seen as a "safe" climate trajectory would enable decision makers to align short-term steps with long-term risk. Most interestingly, business on both sides of the Atlantic has called for a long-term goal (for 2050). Only that sort of time frame provides the opportunity to plan capital turnover. Its absence has led firms that are otherwise supportive to refrain from supporting the Kyoto Protocol's 2008–2012 time frame for obligations. This, in turn, has stiffened the resolve of Kyoto's political opponents.

An informal process involving policy makers, experts, NGOs, and the business community should be undertaken to stimulate governmental negotiations on a quantification of UNFCCC's article 2. Formal choice of a target would not have to be set in stone. It could be seen as a first step subject to periodic revision to accommodate current uncertainty and future learning. One reasonable approach to dealing with current scientific uncertainty would be to focus first on those outcomes for which general agreement on the importance

of avoidance could be more easily achieved (like collapse of the thermohaline circulation of the Gulf stream, disintegration of the West Antarctic ice sheet, or loss of the Greenland ice sheet), and then to agree on a GHG concentration goal commensurate with avoiding such unwanted outcomes.

Even stronger mitigation measures than those applied now will be unable to fully prevent human-induced climate impacts, although the less we reduce emissions now, the higher the anticipated damages are likely to be. This raises the question of who will be held responsible for such damages and directs attention to the third possible area for transatlantic cooperation: collaboration on a global adaptation and compensation fund. Countries would be responsible in proportion to their share of global anthropogenic emissions.<sup>20</sup> Countries would have to pay into a liability fund over decades, and these resources would be used for adaptation and compensation. As liability would be proportional to emissions, the fund would have to indemnify itself from the proportion of impacts caused by emissions of nonmembers. The EU could create such a liability fund, and if countries wish to receive awards for compensation and adaptation, damaged parties would have to go through a court-like system establishing a causal link between the damage claimed and the emissions of GHGs. For the non-EU share of damages caused, they would have to sue other countries independently.

This liability system has three attractive features. First, it may grow as countries may wish to join a worldwide insurance system rather than being harassed in national courts and by the media, NGOs, and IGOs. Second, if future research alters the science of climate change substantially, the remaining funds could be returned to their contributors. Third, there is a clear incentive to mitigate emissions irrespective of the decisions of other countries. As the structure of emitters changes over time, so would their responsibility for liability. While the industrialized countries would initially be most liable for climate-related damages, this burden would shift proportionally to countries that are the dominant emitters of the future—thereby providing incentives for developing carbon-poor energy systems.

Ever since the United States withdrew from the Kyoto Protocol, the EU has managed to increasingly act as an international leader for dealing with the problems posed by global climate change. We have reviewed the strategies Europe has employed to, first, resist hegemonic U.S. dominance and, second, modify U.S. behavior. The EU has applied these strategies (coalition building, *de facto* partnerships, and issue linkage) on different levels of political organization, from the (U.S.) domestic to the global arenas. The latter has been the most important arena, with the Kyoto Protocol as of today qualifying as

a “broad agenda institution with the United States excluded,” in the language of chapter 1. This status quo, however, is an outcome of America’s unilateral withdrawal from international climate policy and not a preferred result of EU action. To the contrary, U.S. reengagement has been and will continue to be a goal of European climate policy. On climate change, like many others issues in the post–Cold War era, the transatlantic elites hold divergent priorities and may no longer understand each other (Neuss 2004). Yet as Jessica Mathews (2002) notes, there is little that cannot be done if Americans and Europeans agree—but very little that can be done if they do not. We cannot be sure whether the suggested strategies for transatlantic rapprochement will succeed, but by not trying we could run an even graver risk: climate change as a reason for the transatlantic partners drifting farther apart.