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# **United States participation in future climate agreements**

An assessment

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Rapporten peker på de viktigste hindrene for USAs deltakelse i internasjonale klimaavtaler, og foreslår noen mulige strategier for å engasjere landet i klimasamarbeidet. Første del av rapporten gir en oversikt over den politiske prosessen i USA fram til i dag.

Andre del beskriver de fire viktigste hindrene for amerikansk deltakelse i bindende internasjonale avtaler om å bekjempe menneskeskapt klimaendring. Tredje del foreslår noen elementer til en strategi for hvordan myndighetene i europeiske land kan forholde seg til USA i klimapolitikken.

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**Abstract:**

The report identifies the major obstacles to U.S. participation in an international treaty to control greenhouse gas emissions, and suggests some possible strategies for reengaging the United States. It proceeds as follows: Section one outlines the U.S. climate policy process up to the present. Section two describes four major barriers to U.S. participation in binding international agreements to mitigate anthropogenic climate change. Section three proposes some elements of a short-term strategy for European governments in dealing with the United States in the field of climate policy.

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## Executive summary

With responsibility for a quarter of the world's CO<sub>2</sub> emissions, and a persistent concern about the costs of any form of regulation of these emissions, the United States is a key player in international climate policy. The United States will not ratify the Kyoto Protocol, and the George W. Bush administration is not likely to play a constructive role in negotiations on new commitments under the United Nations Framework Convention on Climate Change (UNFCCC). However, in a few years Congress may possibly adopt some form of national regulation of greenhouse gases, with modest but mandatory targets. From 2009, the United States may have a president with a different climate policy agenda. Meanwhile, several U.S. states plan to adopt substantial climate policies.

The report identifies four key barriers to U.S. reengagement in international cooperation on regulating greenhouse gas emissions: First, the President and the majority in Congress do not believe the climate problem is sufficiently serious to merit mandatory emissions regulations. Second, there is a strong concern about the costs of regulation and the uncertainty about those costs. Third, concern about competition from developing countries and consequent loss of manufacturing jobs makes binding commitments for the United States without parallel commitments for developing countries controversial domestically. Fourth, the U.S. political system means that adopting any climate policy at the federal level is likely to be a difficult and time-consuming process, and in particular that negotiating partners face a substantial risk that any binding international agreement negotiated by the executive branch will not be ratified by the necessary 2/3 majority in the Senate. The first obstacle may eventually be overcome through information, arguments or simply through elections bringing candidates with different views into office. The three other barriers should be seen as given constraints on policy.

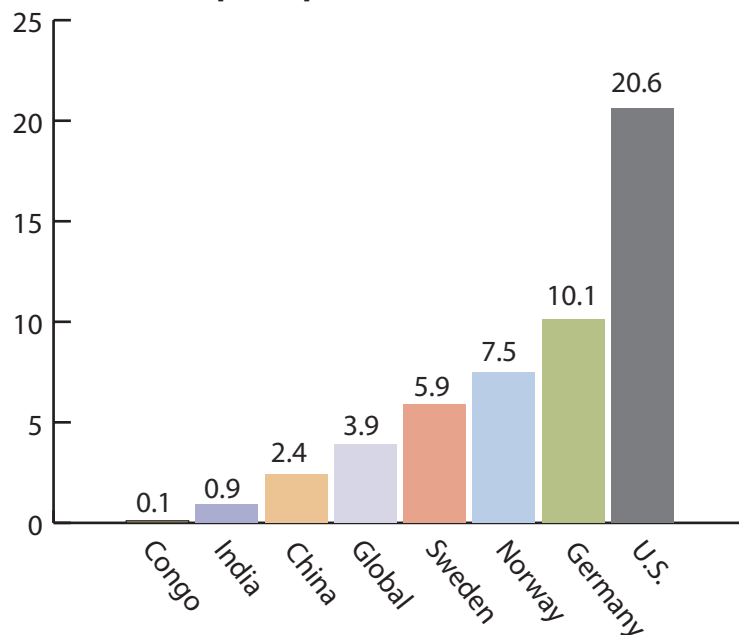
The United States' unwillingness to adopt binding commitments poses difficult challenges for European governments seeking to promote international cooperation in this field. In devising a climate policy strategy for the next few years, European governments seeking to extend and improve the climate regime must meet the following six challenges:

First, they need to ensure a successful implementation of the Kyoto Protocol, including well-functioning systems for emissions trading. This would serve as an example and argument for U.S. proponents of similar regulations. Second, in conjunction with other Kyoto Protocol parties, they should move ahead with talks on the issue of a second commitment period to follow the first period 2008-2012, even in the absence of constructive U.S. government participation. Postponing negotiations until the United States might reengage would create further uncertainty about the future of the regulatory system now being set up, which could damage its credibility and effectiveness. Third, European governments should help raise the profile of the climate change issue on the domestic U.S. agenda by the means available to them. Fourth, they must maintain a dialogue between the Kyoto parties and those actors within the United States who are developing key climate policy initiatives in Congress and at the state level. Ensuring compatibility of emissions trading systems being set up in different parts of the world is a key concern. Converging principles and standards could be the first step towards eventually linking the separate trading systems. Fifth, Europeans should consider in which climate-relevant fields other than actual emissions regulation they might usefully cooperate with the Americans on the short term, notably science and technology. A pledge to match any U.S. increase in spending on climate-relevant R&D or technology transfer might be one way to coordinate action while bypassing formal negotiations. Sixth, European governments should reconsider their vision of the future international climate regime and how the United States might eventually reengage. Alternatives to the Kyoto Protocol architecture should be carefully considered with an eye to future reengagement of the United States. And for several reasons it might be better both for the United States and its negotiating partners if the United States developed a modest but credible domestic policy to control greenhouse gas emissions *before* it negotiates binding international commitments.

## 1 Introduction: An outline of the US climate policy process

By any measure, the United States is a key player in international climate policy. It is responsible for nearly a quarter of the world's primary energy consumption and a similar share of CO<sub>2</sub> emissions from fossil fuels. Among the major economies, it has the highest CO<sub>2</sub> emissions per capita.<sup>1</sup> These simple facts explain why the rest of the world has a keen interest in U.S. climate policy. Concern is reinforced by the upward trend in emissions. Total U.S. greenhouse gas emissions grew by about 12 percent from 1990 to 1999, and are projected to keep growing by a similar rate over the next two decades (U.S. Department of State 2002). These trends have also helped make climate policy a controversial and divisive issue within the United States.

### CO<sub>2</sub> emissions per capita (tons, 2000)



**Source:** IEA (International Energy Agency)

**Figure 1. CO<sub>2</sub> emissions per capita**

### 1.1 U.S. climate policy before 2001

Since the beginning of the climate change negotiations, the United States has been particularly concerned with the costs of climate policy (Schreurs 2004). Under President George H. W. Bush, U.S. opposition prevented any binding targets for emissions reductions from being set in the Climate Convention (UNFCCC), which was finalized in 1992 at the UNCED conference in Rio. However, the United States was among the first countries to sign the Convention.

The Clinton administration sought a more ambitious climate policy, but was unable to get an important energy tax proposal passed into law by Congress. Since then, domestic climate policy has been limited to a modest set of energy efficiency standards, tax incentives, and voluntary measures for the private sector. In the UNFCCC process, U.S. negotiators kept

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<sup>1</sup> IEA International Energy Annual 2002: <http://www.eia.doe.gov/emeu/iea/carbon.html>

stressing the need to keep any agreement cost-effective. Several aspects of the UNFCCC and the Kyoto Protocol of 1997 bear evidence of the U.S. concern about cost (Agrawala and Andresen 2001:123). These include the “comprehensive approach” embracing a wide range of gases, sources and sinks, and the principle of flexible implementation, allowing countries to trade emissions permits and credits across borders. On the other hand, the United States accepted a target of 7 percent reduction in 2008-2012 relative to 1990. In light of emissions trends since 1990, this looked more demanding than the 8 percent target for the EU countries. All the while, the Clinton administration was squeezed between foreign governments on one side and Congress and U.S. business lobbies on the other. The industry-backed Global Climate Coalition and other anti-regulation interests ran major ad and lobbying campaigns claiming both that the scientific basis for expecting climate change was unsound, and that the cost of regulation was prohibitive (McCright and Dunlap 2000; McCright and Dunlap 2003).

The 1995 Berlin Mandate for the negotiations that eventually led to the Kyoto Protocol explicitly exempted developing countries from any new commitments. The rationale was the developed countries’ historical responsibility for greenhouse gas emissions, their currently high per capita emissions, and their superior financial and technological capacity for mitigation. The Clinton administration’s consent to this mandate raised strong objections in Congress and industry. One consequence was the Byrd-Hagel “sense of the Senate” resolution, passed unanimously a few months before the 1997 Kyoto conference, stating that the United States should not be a signatory to any protocol which would “mandate new commitments to limit or reduce greenhouse gas emissions for the [developed] Annex I Parties, unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period” (U.S. Senate 1997). The resolution declared that an agreement that did not fulfill this demand would not be ratified by the Senate.

The Byrd-Hagel resolution was important because any international treaty must be ratified by the Senate with a 2/3 majority for the United States to be bound by it. Supporters of international cooperation on climate change in Congress and the White House preferred a unanimous resolution to losing the vote by a large margin. However, the resolution placed them in a difficult situation. The developing countries were determined to defend the concession they had gained in Berlin. It seemed that the negotiations had reached an impasse, with the United States and the developing countries insisting that the other party move first. The Clinton administration’s strategy was to accept the Kyoto Protocol without developing country targets, and to seek what the President called “meaningful participation from key developing countries” in more creative ways. This included voluntary commitments from developing countries which would allow them to take part in emissions trading. U.S. diplomatic efforts following the Kyoto conference gave modest results, even if Argentina and Kazakstan did volunteer to adopt targets (Barros and Grand 2002; Aldy 2004). It was fairly obvious that the Senate’s criterion for ratification was not met, and the Clinton administration never submitted the Kyoto Protocol to the Senate for ratification.

The other main condition imposed by the Byrd-Hagel resolution was that the protocol should not “result in serious harm to the economy of the United States” (U.S. Senate 1997). In the domestic debate on costs of implementing the Protocol following the Kyoto conference, assumptions about developing country participation again turned out to be a critical issue. Assuming that developing countries would participate in emissions trading radically reduced projected compliance costs for the United States because of ample opportunities to cut emissions cheaply in those countries (Weyant 1999). The Clinton administration’s economic assessments assumed broad developing country participation in trading which was in line with the administration’s policy but not with prevailing international realities (Aldy 2004).

## **1.2 Climate policy under George W. Bush**

Developing country participation was also emphasized during the first months of the George W. Bush administration. When definitely closing the door on US ratification of the Kyoto Protocol, President Bush stated, “I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the U.S. economy” (U.S. White House 2001). While Bush drew criticism for his blunt rejection, Democratic leaders have generally argued for reengagement and renegotiation rather than ratification of the Kyoto Protocol. In recent UNFCCC meetings, the Bush administration has sided with most of the developing countries in opposing calls from the EU, Japan, Norway and others to open talks on new commitments to follow or supplement the Kyoto targets.

In addition to rejecting the Kyoto Protocol, the newly elected President George W. Bush also turned away from a campaign promise to regulate CO<sub>2</sub> from power plants as a pollutant. Partly in response to criticism of these decisions, his administration has sought to outline an alternative to the Kyoto approach to climate change. This alternative has three major components:

- An emissions target defined relative to GDP,
- Voluntary measures to implement the target, and
- Research, development and demonstration efforts to introduce new energy technologies that may reduce emissions in the future.

The Global Climate Change Initiatives announced by President George W. Bush on February 14, 2002, commits the United States to “reduce the greenhouse gas intensity of the U.S. economy by 18 percent over the next ten years” (U.S. White House 2002). Critics have noted that this target amounts to little more than extending the trend in greenhouse gas intensity (emissions per dollar of GDP) reduction from the previous decade, and that it means allowing actual emissions to rise substantially over the coming years (Menz 2002). The implementation of the target depends on voluntary measures. In February 2002, the President challenged businesses to “make specific commitments to improving the greenhouse gas intensity of their operations and to reduce emissions.” This initiative has been followed up by a series of agreements and declarations from business associations representing major, energy-intensive industrial sectors, which promises to seek to reduce the emissions intensity of their operations (U.S. EPA 2003). The quantified targets of most of these voluntary commitments are, however, even more modest than the overall national goal defined by the administration. This is hardly surprising. In the absence of a credible threat of mandatory controls in case of non-compliance, there are weak incentives for industry to effectively implement “voluntary” emissions reductions (Torvanger and Skodvin 2002).

The one area of climate policy where the Bush administration has introduced substantial new policies and funding is energy technology research, development and demonstration. The Bush administration has increased funding for research, development and demonstration of hydrogen as well as carbon capture and storage technologies. It has announced long-term projects and public-private partnerships including the FutureGen plant, which is expected to produce electricity and hydrogen from coal without CO<sub>2</sub> emissions, the FreedomCAR project to develop hydrogen-powered cars, and the parallel Hydrogen Fuel Initiative.

During 2003 and 2004, three new multilateral agreements on climate technology cooperation saw the light of day: the Carbon Sequestration Leadership Forum (CSLF), the International Partnership for the Hydrogen Economy (IPHE), and the recently launched Methane to Markets Partnership (MMP) that will promote the collection of methane from landfills, coal mines and petroleum activity to use it as an energy source. All three collaborations seem initially to have been U.S. initiatives (U.S. Department of State 2003; U.S. White House 2003; U.S. Environmental Protection Agency 2004). The U.S. Department

of Energy hosts the secretariats of CSLF and IPHE. In the most recent initiative, MMP, the U.S. Environmental Protection Agency plays a leading role.<sup>2</sup> All three agreements are non-binding and do not impose financial or other commitments on the signatories. Objectives include the identification and facilitation of collaborative efforts.

In Congress, there is considerable support for legislation that would regulate U.S. greenhouse gas emissions, but no majority. The most prominent initiative is the Lieberman-McCain Climate Stewardship Act, which was introduced in the Senate and rejected by a 55-43 majority in October 2003. While most of the supporters were Democrats, a number of Democrats also defected and voted against the proposal, while some Republicans voted in favor, including co-sponsor John McCain. Senators from major coal-producing states were much more likely to have voted against the bill, (Fisher 2004). This was the first time the Senate voted on legislation that would place binding constraints on greenhouse gas emissions. The proposal would have capped total 2010 emissions at the 2000 level for the sectors covered by the legislation, and would have allowed trading of permits and credits. The sectors covered represent some 85% of total US GHG emissions.<sup>3</sup>

Similar legislation has been introduced in the House of Representatives, but commands considerably less support there. Both houses of Congress have to agree in order to pass a bill into law.

Meanwhile, the most important developments in U.S. climate policy are taking place at the state and regional levels. Several states have already passed legislation to control greenhouse emissions. For instance, Massachusetts and New Hampshire have introduced CO<sub>2</sub> limits for power plants. More and more states are also introducing renewable portfolio standard laws, which require electric utilities to sell a certain share of renewable energy. Most recently, such a law won the support of Colorado's voters in a ballot initiative on November 2, 2004.<sup>4</sup>

The important Regional Greenhouse Gas Initiative was first proposed by New York Governor George E. Pataki in 2003. Nine Northeastern states are currently working on a regional cap-and-trade system for power plants. They plan to present a program design proposal by April 2005. In parallel, the governors of the New England states are working with their counterparts, the premiers of the Eastern Canadian provinces, under a 2001 agreement that aims to reduce regional emissions to the 1990 level by 2010. Cooperation on emission registries and policies could potentially evolve into a cross-border trading system.

Finally, California is introducing regulation that requires producers of cars and trucks to sell vehicles that meet far more stringent emissions standards. In September 2004, the California Air Resources Board approved rules which will require the companies to sell low-emissions vehicles from 2009. Compared to today, the rules are expected to reduce the average greenhouse gas emissions per kilometer from new vehicles by about 22 percent in 2012 and about 30 percent in 2016. The states of New York, Massachusetts, New Jersey, Vermont, Connecticut, Rhode Island and Maine, as well as the nation of Canada, are expected to consider adopting similar regulations. The rule is virtually certain to be challenged in the courts, and the outcome will most likely decide its fate. A key issue is whether these rules, which in practice will require reduced fuel consumption, are really fuel efficiency standards (which are a federal prerogative) or if they are properly in the realm of air pollution where California is allowed to make its own standards.

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<sup>2</sup> See the following web pages: [www.cslforum.org](http://www.cslforum.org), <http://www.iphe.net/> og [www.epa.gov/methanetomarkets](http://www.epa.gov/methanetomarkets)

<sup>3</sup> [http://www.pewclimate.org/policy\\_center/analyses/s\\_139\\_summary.cfm](http://www.pewclimate.org/policy_center/analyses/s_139_summary.cfm)

<sup>4</sup> See Menz (2004) for more on green electricity policies in the U.S. Menz, F. C. (2004). Green Electricity Market Development in the United States: Policy Analysis and Case Studies, CICERO. 2004. <http://www.cicero.uio.no/media/2639.pdf>.



In the private sector, two important developments are the fragmentation of the earlier united business opposition against greenhouse gas regulations, and the emergence of voluntary targets and trading systems. The dismantling of the powerful anti-regulation lobby group Global Climate Coalition came about not only because of its success in achieving its goals under the Bush administration, but also because of changes in the positions of some companies. Several major companies in emissions-intensive sectors have partnered with the Pew Center on Global Climate Change and adopted voluntary emissions targets. The private Chicago Climate Exchange even offers trading in emissions reduction credits. These developments will not amount to a solution, but may help the proponents of regulation.

After the heated Bush/Kerry race, a brief excursion into counterfactual speculation may add some useful perspective to the assessment of U.S. climate policy. The visibility and drama of presidential elections tends to exaggerate the consequences, which are in fact tempered by the limited room for maneuver an incoming president often faces. The Clinton administration favored both the Kyoto Protocol and domestic regulations including a special energy tax, but the conservative Republican Congress ensured that the final policy outcomes were not much different from what happened earlier under President George H. W. Bush and later under President George W. Bush. The Clinton administration's most tangible results in climate policy were a number of tax credit arrangements and voluntary programs that were largely kept in place under George W. Bush (Brewer 2004). The immediate result of a Kerry victory in the elections would most likely have been a return to a situation similar to the Clinton years: A relatively ambitious administration with little room for action.

### ***1.3 Why do Europe and the US see climate change so differently?***

European governments see climate change differently than their U.S. counterpart. The transatlantic divide on climate policy has been explained by different costs, different values, different political systems and historical contingencies. The latter two are perhaps the most convincing explanations.

Economic analyses suggest that if the United States had ratified the Kyoto Protocol, it would have faced somewhat higher costs of compliance, measured as share of GDP, than the European Union (Weyant 1999; Metz et al. 2001; Busby and Ochs 2004). However, the difference in cost estimates between the United States and the EU using any given set of assumptions about the world economy and the implementation of the Protocol is in most cases much smaller than the range of estimates for either of the two separately. The projected gap between the Kyoto targets and expected 2010 emissions given "business as usual" is much larger in the United States. This is largely due to faster growth in the U.S. economy and falling emissions in the UK and Germany during the 1990s. On the other hand, most models suggest that marginal abatement costs (the cost of reducing emissions by one ton) is lower in the United States. On their own, differences in cost do not seem to explain the difference in overall approach to climate policy (Busby and Ochs 2004).

It also seems that divergence in deep-seated values toward environmental issues does not explain this difference. The level of concern about climate change among the public at large does not vary sufficiently to explain the differences between the United States and Europe by itself (Brewer 2003; Busby and Ochs 2004). However, variations in political culture and attitudes may go some way in explaining the transatlantic climate policy divide. Opinion polls do suggest that the American public is more concerned about the costs of regulation. A harsher opposition in general to taxes and government regulation in U.S. politics and public opinion may have influenced outcomes. Public debate and the policy process in the United States seem to have been more focused on potential costs of regulation from an early point. Since the beginning of the climate change negotiations, the United States has stressed the need to keep mitigation costs down, while the EU in particular has stressed the precautionary principle and the risks of inaction (Schreurs 2004). On the home front, formal cost-benefit analysis has played a larger role in U.S. debates on climate policy than on the other side of the

Atlantic (Aldy 2004; Schreurs 2004). Meanwhile, the long-standing European skepticism to emissions trading has been ironically reversed by the EU's pioneering CO<sub>2</sub> trading scheme that will take effect from 2005; the skepticism that may have looked like evidence of a deep-seated and persistent difference in political culture now seems to be simply a result of a lag in learning and experience with that particular instrument (Christiansen and Wettestad 2003).

Perhaps most convincingly, the difference in approaches to climate policy has been attributed to the way the European and U.S. political systems allow environmental and industrial interests to be represented. While both the United States and major European countries have fairly strong environmental movements that are up against industry lobbies with superior financial and bargaining resources, the opportunities for exerting influence are different. Important determinants include the role Green parties (and like-minded left and centre parties in countries such as Denmark and Norway) have been able to play in Europe due to proportional representation and coalition governments. Moreover, the much greater importance of private campaign funding in the United States gives business lobbies a crucial advantage (Busby and Ochs 2004).

Historical contingencies have also played a role: The enlisting of the Conservative Kohl and Thatcher governments to the climate protection cause at a juncture when their domestic emissions were falling helps explain the lower level of partisan conflict over the climate change issue in European countries. Similarly, the prevalence of center-left coalitions that included relatively uncompromising Green parties in European countries at the time of the 2000 Hague conference (COP6) helps explain why the U.S.–European conflict was cemented. Its timing just before the U.S. presidential elections helped make the U.S. position inflexible (Lisowski 2003; Busby and Ochs 2004).

## **2 Barriers against U.S. participation**

Based on experience from the U.S. climate policy process up to the present, it is possible to identify four major barriers to U.S. participation in a binding international agreement to control greenhouse gases. The first one – the fact that neither the President nor the majority in Congress see climate change as a sufficiently serious threat to merit any kind of binding regulation – is a reality that is difficult to influence from abroad, but which may possibly change in a few years.

The three others – concern about the costs of compliance, concern about competition from developing countries, and the risk of delays and policy gridlock inherent in the U.S. political system – may be expected to remain enduring traits of U.S. climate policy that future international initiatives meant to include the United States will have to take into account.

### **2.1 *Decision-makers' views of the climate change problem***

The key barrier to a more ambitious climate policy in the United States is the fact that neither the Congressional majority nor the current president believes the problem is sufficiently serious to merit mandatory emissions regulations. This does *not* reflect the view of the American public, which according to opinion polls shows a considerable degree of concern and is mostly supportive of mandatory greenhouse gas controls. Actually, the “level of U.S. public concern is nearly as high as it is among European publics” (Brewer 2003). In other words, the low level of ambition in U.S. climate policy seems to have come about despite, not because of, public opinion.

The barrier posed by the low level of concern among the political elite may be overcome in three ways. One way is through elections. While there are diverging views in both parties, Democratic leaders have generally seen the problem as much more serious than their Republican counterparts, and have consequently supported greenhouse gas regulation. The

Republican victory in the 2004 elections means that the opponents of regulation strengthened their hand slightly in Congress. The first junctures for possible change through elections are the mid-term Congress elections in 2006 and the 2008 elections for president and Congress.

A second way around the barrier is through arguments and evidence. If those in office come to see the problem as more serious than before (or public concern with it more pressing), the outlook for U.S. climate policy might change. One interesting development is the Bush administration's fairly recent expressions of confidence in the conclusion that anthropogenic emissions are in fact warming the atmosphere (Revkin 2004). However, a major shift in attitude from the first to the second George W. Bush administration seems unlikely barring dramatic events giving overwhelming evidence or illustration of the urgency of the climate change problem. Change of opinion among members of Congress is more likely to be of importance over the next four years, but will probably not be sufficient by itself to secure a majority for greenhouse gas controls.

The third way around the obstacle is to make the solutions more politically palatable to the current administration. If the potential solutions seem less threatening to the economic interests of influential actors, the will to accept the problem as serious will most likely increase. The issues of costs will be covered in the next section.

## **2.2 Cost of compliance**

The cost of compliance has been, and will remain, a key concern for the United States with any climate policy commitment. Cost issues dominated the Kyoto debate, in the shape of formal economic analyses of aggregate cost as well as claims about specific consequences, including increased consumer prices and loss of jobs. In addition to expected costs, *uncertainty* about cost is important, because it could imply a risk of unacceptably high costs.

While costs are important for any country in deciding whether or not to accept environmental commitments, it seems that the U.S. debate has been particularly focused on cost issues from an early stage on. Note, however, that the general concern with cost does *not* mean that U.S. policy makers generally think like professional economists (Lutter and Shogren 2004). While much emphasis has been placed on analyses of the costs of regulation, there has been much less interest in quantifying its economic benefits and actually comparing costs and benefits (Bang 2003). Given a wish to limit emissions, maximizing cost-effectiveness is not necessarily the most important concern for policy makers, as evidenced in e.g. their observed preference for fuel economy standards over fuel taxes (Victor 2004). It is also important to stress that claims about high costs for society may have consequences even when they are not well founded, if backed by actors able to spend large resources on presenting them.

U.S. proponents of greenhouse gas controls have suggested two ways around the cost barrier. The first way focuses on ensuring acceptable aggregate costs by means of policy instrument design – and by setting less ambitious targets. There seems to be a wide-spread consensus among American economists and climate policy analysts that the U.S. Kyoto target was too ambitious in the short term, and that the cost-reducing flexibility built into the Kyoto Protocol may need to be supplemented with further arrangements that will limit costs work and reduce the risk of unexpectedly high mitigation costs (Victor 2001; Aldy et al. 2003). However, there is currently no consensus regarding what kind of mechanism is best suited to limit costs. Options include intensity targets (emissions targets which are defined relative to GDP) and a “safety valve” in emissions trading. The latter is an arrangement where the government will automatically issue more emission permits and sell them at a certain price if the market price for permits exceeds that level (this type of arrangement is also referred to as price cap or hybrid system). An emissions tax would also avoid risks of unexpectedly expensive regulation, but the political stigma attached to taxes will probably stand in the way

of pure tax solutions. In practice, a pure tax policy may also be more difficult to harmonize through international agreements.

A second possible way to circumvent the cost barrier focuses on reducing the costs for specific, politically important sectors, which may in some cases conflict with overall cost-effectiveness. For instance, a major source of CO<sub>2</sub> emissions in the United States is coal-fired power plants. Coal is mined in more than half of the 50 U.S. states, and constitutes a labor-intensive and therefore politically important sector (Fisher 2004). Even more states depend on coal-fired electricity for their industry and households. Government-sponsored projects to research, develop, and even subsidize investment in carbon capture and storage technologies may make climate policy measures more acceptable to the coal sector and its political defenders. On the other hand, U.S. agriculture may in fact earn from climate policy. Credits for carbon sequestration in agricultural soils and income from sale of raw materials for biofuels represent welcome additional sources for farmers. Proponents of more ambitious climate policies in the United States have sought to use these potentials to enlist support from senators and representatives from agricultural districts.

### **2.3 Competitiveness concerns**

During the second half of the 1990s, the climate change negotiations were haunted by the following dilemma: The United States and the major developing countries could not agree on who should make the first move. In the United States, the Senate would not accept binding commitments unless the developing countries also committed themselves to emissions targets at the same time. The developing countries, on the other hand, insisted that the United States and other industrialized countries at the very least demonstrate their willingness to adopt and actually implement emissions targets in practice before they would even consider following suit.

As we have seen in section 1, the George W. Bush administration does not encourage developing countries to adopt binding targets to reduce emissions and has come close to arguing *against* such commitments. This shift occurred because the unwillingness of both the U.S. President and Congress to adopt binding targets of any kind has rendered the question of who should move first obsolete.

In case of a future policy shift toward U.S. reengagement in international cooperation on greenhouse gas controls, the dilemma is likely to reemerge. If the United States were to reengage in such negotiations, the competitiveness concerns underlying the Byrd-Hagel resolution would again become relevant. Economic competition from low-cost countries such as China, India and Mexico, and consequent loss of jobs in the U.S. are in fact enduring concerns that shape U.S. policy in several areas apart from climate change. The image of unfair competition from low-cost countries exempted from emissions targets was exploited to good effect by the anti-Kyoto industry lobby group Global Climate Coalition. These concerns are not likely to become less important in the near future. The relationship between the United States and growing Asian economies is a politically and emotionally charged issue.

The political salience of competition issues can be seen in the 2002 decision by President Bush to place a protective tariff on steel imports to the United States. Equally, the heated debate on outsourcing of jobs overseas before the 2004 presidential elections illustrates this point. Traditional manufacturing and coal mining regions are key political battlegrounds, with states such as Ohio, Pennsylvania, and West Virginia seen as crucial to the outcome of presidential elections, and thus receiving much of the attention of political candidates and strategists.

More generally, the climate change issue tends to be more systematically framed in economic and cost terms in the United States than in Europe, with a greater emphasis both on formal cost-benefit analysis and on cost and competitiveness arguments in general (Bang 2003; Brewer 2003; Schreurs 2004). This framing of course highlights the drawbacks of

shouldering a burden without competitors doing the same, while an ethical or risk framing might give a different take on the issue. Analyses suggest that public support for environmental protection measures in the United States is generally strong, but vulnerable to cost arguments (Davis and Wurth 2003). In the post-9/11 era, concern about supposedly unfair competition from developing countries is underlined by the linking of economic strength and national security. The prospect of being bound by an agreement which may limit the strength of the United States – economically, if not militarily – may be another line of attack for opponents of future international commitments.

## **2.4 Political system**

Through its “checks and balances”, the U.S. political system is explicitly designed to avoid excessive concentration of power. Balance is provided by a strict separation of powers between the executive, legislative and judiciary branches of government, as well as power sharing between the federal and state governments. The system offers a multitude of opportunities for resourceful stakeholders, including businesses, to influence policy. These characteristics of the U.S. political system have profoundly shaped international climate policy to date – and may be expected to do so in the future.

First and foremost, the U.S. constitution specifies that a 2/3 majority in Senate must ratify an international agreement before the United States can become a party to it. The fate of the Kyoto Protocol, where the Clinton administration negotiated and signed an agreement with other countries while the Senate blocked ratification, is by no means unique. Since President Wilson’s League of Nations after World War I (the United States itself never became a party), this story has repeated itself many times. The President can not force the Senate to ratify a treaty. Conversely, the Senate can not force the president to negotiate and sign a treaty.

Second, mandates and budgets for domestic policy programs must pass both houses of Congress, and may be vetoed by the President unless they have a qualified majority in Congress. The risk of “policy gridlock” – the blocking of new policy initiatives even where there is fairly widespread support for policy change but disagreement over the specifics – is endemic to the U.S. political system. This is particularly true whenever different parties are in control of Congress and the presidency, or when there are different majorities in the two houses of Congress.

Third, the U.S. system offers particularly good access to policy processes for resourceful actors such as organized business interests. U.S. environmental groups are also fairly strong and have similar opportunities, but they are unable to compete with major business sectors in terms of resources such as money or manpower. Apart from the multiple access points offered by the complex political system, politicians’ reliance on private campaign funding is a major source of influence for business interests (Busby and Ochs 2004).

All of this means, first, that it is a considerable challenge for pro-environmental interests to navigate any ambitious policy proposal through the U.S. political system. Second, it means that the United States has a *problem of credible commitment* internationally: Negotiating partners do not know whether the United States will in the end ratify an agreement, and it may take a long time until they find out (Busby and Ochs 2004).<sup>5</sup>

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<sup>5</sup> These traits are by no means unique to the United States. The EU member countries may for instance have similar problems in agreeing to commit the EU. The protracted ratification process of the Kyoto Protocol in Russia provides another example.

### **3 Elements of a strategy for European governments**

To sum up the situation facing governments seeking to extend and improve the climate regime: The United States will not ratify the Kyoto Protocol. Under President George W. Bush, the United States is unlikely to reengage in negotiations on future commitments under the UNFCCC, as evidenced by its unflinching stance at the recent tenth Conference of the Parties to the UNFCCC (COP10) in Buenos Aires. Under the current administration, the most promising area for international cooperation is therefore technology research, development and demonstration. Meanwhile, there are important processes taking place in Congress, industry and several states (see also section 1.2. above).

The climate policy initiatives launched by several states are particularly interesting. Over time, these may lead to increased pressure for a more proactive, unified national climate policy, even from emissions-intensive industries, which may come to prefer a more predictable and consistent regulatory environment to state-by-state solutions. Support for mandatory greenhouse gas controls has become considerable in Congress. However there is no majority for such a policy at present, and the recent elections were a setback for the proponents of such regulation. Over the next few years, that situation could change. Elections will largely determine the outcomes, along with the perceived public demand for a more ambitious climate policy, which may influence the positions of individual officials. Key dates are the mid-term Congress elections in 2006 and the 2008 elections for president and Congress. In the private sector the common front against regulation of greenhouse gases has been softened and positions have become more differentiated over several years. These developments in industry positions will not cause a policy shift in and of themselves, but may help make such a shift feasible under a different political leadership.

In the current situation, European governments hoping to eventually reengage the U.S. in negotiations on future commitments may do two things to realize that goal: They may use the limited means available to influence the U.S. government's position, and they may seek to lay the foundations for a climate regime the United States could be willing to join whenever the political situation changes. In pursuing those twin goals, Europeans and others will need to confront six important challenges.

First of all, they must ensure a successful implementation of the Kyoto Protocol, including well-functioning systems for emissions trading. This will provide a useful argument for U.S. proponents of similar regulations. If, on the other hand, the Protocol and the emissions trading schemes are widely seen as failures, it would strengthen the hand of U.S. opponents of greenhouse gas regulations.

Second, the Kyoto parties will have to deal with the issue of a second commitment period of the Kyoto Protocol to follow the first period 2008-2012, or alternatively some other arrangement to replace the Kyoto Protocol after 2012, without the U.S. government as an active or constructive participant in talks on this issue. The Protocol stipulates that discussions on a second commitment period should start in 2005. The Bush administration has previously made it clear that it does not expect to review its stance on climate policy until 2012.

Clearly, going further with an international climate regime without participation from the United States is an unsatisfactory solution. For one thing, the United States is responsible for a quarter of the world's emissions and these will still be left unchecked. Furthermore, the emissions reduction targets for a regime that does not include the United States are likely to remain very modest. Concern about competitiveness toward the U.S. will severely limit the will to strengthen targets in other Annex 1 countries. Major developing countries are unlikely to accept any substantial commitments unless all the major developed countries are taking part in a joint global effort.

But given the policy of the current U.S. leadership, it is not clear that better alternatives exist. Postponing the issue of future commitments while waiting for the United States to change its mind – or designing a post-Kyoto agreement that requires U.S. participation to function – would mean waiting at least until 2009 before countries *start* negotiating commitments for the years after 2012. This would throw into doubt the future of the entire regulatory system currently being implemented, including the Kyoto Protocol's targets and mechanisms and the EU emissions trading scheme. That is consequential because expectations regarding future regulations may in fact be more important to business investment decisions than the regulations actually in place at the time of the decision. Business actors' assessments of the outlook for international climate policy will manifest themselves both in emissions permit prices and in long-term investments in energy technology. In other words, throwing the future of the existing regime and regulations into doubt may further undermine the already modest effects of these policies.

In case it is not possible to make progress on the issue of post-2012 commitments in the Kyoto Protocol context, an alternative approach might be for the EU and like-minded countries to commit themselves strongly to post-2012 targets or policies either unilaterally or through an agreement between a smaller number of parties. Again, this is far from an ideal solution, but may be the best option available. If regulations of greenhouse gas emissions are to have any noticeable effect on long-term investments, it is crucial that the regulated businesses are not given reason to expect that the regulations may be removed in a few years.

The third challenge is to help raise the profile of the climate change issue on the domestic U.S. agenda by those means available to foreign actors. Realistically, the main goal of European diplomatic efforts in the climate change field should not be to change the minds of their current U.S. negotiating partners, which represent the George W. Bush administration whose position seems entrenched. Rather, persistent challenges from European leaders help keep the climate change issue on the U.S. political agenda and in the media. This increases the attention paid to the issue, raises the political stakes somewhat, and thus helps those actors within the U.S. advocating a more proactive climate policy.

In this regard it may be useful to consider experiences from the acid rain debate during the 70s and 80s. Scandinavian efforts to make the UK and states on the continent of Europe accept responsibility for long-range transboundary pollutants acidifying Scandinavian lakes and streams had a North American parallel. The Canadian government participated actively in the U.S. debate on the same issue, both through formal diplomatic channels, scientific cooperation and through public statements and organized PR efforts. While domestic U.S. actors arguably played an even more important role, there is little doubt that the Canadians helped raise the profile of the issue.

Similarly, today the emphasis European leaders such as Tony Blair and Gerhard Schroeder have repeatedly placed on climate change and the Kyoto Protocol in their comments on the Euro-American relationship help keep the issue warm in the United States. Blair's pledge to place climate change high on the agenda of the G8 during Britain's presidency of the group next year promises to keep the pressure on (Reuters news agency 2004). The IPCC process is another channel by which foreign climate change experts – and governments – are to some extent heard in the United States. For Norway and other states with interests in the Arctic, the Arctic Council where the United States is also among the members is one channel for engaging the United States in discussing the problem, as seen recently in the debates over the Arctic Climate Impact Assessment (ACIA) process.

For the time being, the results of such efforts will probably be indirect at best, in the form of increased attention to climate change issues in the United States, which may increase the political cost of non-action. This may eventually help convince a sufficient number of members of Congress, or their constituencies, that the problem is serious enough to justify mandatory regulation of greenhouse gases. Increased attention to the issue could even help bring about a situation where even the Republican presidential candidate in 2008 might

consider moving away from the Bush position on climate change. Foreign pressure alone will certainly not bring about any of these changes, but in conjunction with pressure from domestic actors it might exert considerable influence.

Again, the acid rain parallel is instructive. After eight years of stinging attacks on President Reagan's refusal to regulate SO<sub>2</sub> both from environmental groups and scientists as well as the Canadians, Reagan's vice president George H. W. Bush campaigned on a promise to regulate sulfur emissions in 1988. Bush Sr. was apparently seeking to distance himself from President Reagan and to build his own, more centrist platform. As president, George H. W. Bush followed up on his campaign promise, and Congress finally passed the Clean Air Act Amendments of 1990, providing for a SO<sub>2</sub> cap-and-trade system for the power sector. This policy was primarily a product of pressure from domestic actors, but the engagement of a foreign government with a legitimate interest in the matter may also have played a role.

Fourth, it is important to maintain a dialogue between the Kyoto parties and those actors within the United States who are developing key climate policy initiatives in Congress and at the state level, with an eye to making policies converge on joint standards and principles. Such a dialogue is needed both between officials at different levels and between various nongovernmental actors. In particular, it is important to strive for some degree of harmonization in the design of emissions trading systems and the associated registries, tradable units, and reporting and verification protocols. This may eventually facilitate a linking of the various systems at some point. There is currently a discussion within the EU about linking the EU Emissions Trading Scheme (EU ETS) with the state-level and regional trading schemes being prepared in parts of the United States. (Buckens and Belin 2004:75; Kruger and Pizer 2004:12; Point Carbon 2004). This would probably require an amendment of the EU ETS directive. The background for the discussion on linking with U.S. trading systems is a strong wish in many European capitals to engage the U.S. international cooperation in this field and lay the groundwork for U.S. participation in a future climate agreement beyond the Kyoto Protocol. In this perspective, linking is indeed a meaningful strategy. However, key concerns for the EU with this strategy may be the consequences of such linkage for the scheme's ability to help the EU and its member states fulfill their Kyoto commitments, and the future relationship between the EU ETS and International Emissions Trading (IET) under the Kyoto Protocol.<sup>6</sup>

The Kyoto Protocol and the associated Marrakech Accords do not allow non-parties to participate in the three Kyoto Mechanisms, which are International Emissions Trading, CDM and Joint Implementation. Allowing credits or permits originating from a non-party into the system would require an amendment to the Protocol. There would be many problems and challenges associated with such a course of action, including how to ensure the environmental integrity of units from non-parties. However, if confronted with a persisting situation where countries such as the United States and Australia are not parties to the Protocol or any follow-up agreement, but develop full-fledged cap-and-trade or project credit systems on a regional or even national basis, the Kyoto parties may be willing to consider the issue. It should also be noted that there is nothing in the Kyoto and Marrakech rules which would stop companies or other actors based in a non-party country from *buying* and keeping emissions permits or reduction credits from the Kyoto mechanisms (known as AAUs, CERs and ERUs). If the designers of a regional (or national) cap-and-trade system in the United States want to recognize Kyoto mechanism permits or credits, they are free to do so as far as the Kyoto rules

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<sup>6</sup> In their current version, the rules for the EU scheme provides for the use of credits from the project-based Kyoto mechanisms CDM and Joint Implementation to comply with the EU ETS requirements, but do not allow use of so-called "Assigned Amount Units" from International Emissions Trading under the Kyoto Protocol (Egenhofer and Fujiwara 2004; Kruger and Pizer 2004). While there are provisions for linking directly with other national emissions trading schemes in Annex B (developed countries that have ratified the Protocol, there are no guidelines for linking with trading schemes in a country that has not ratified.



are concerned.<sup>7</sup> Another matter is that there may be domestic legal concerns for state governments or private companies regarding the use of trading mechanisms set up by an international agreement to which the United States is not a party.

The need for dialogue and efforts to make policy designs converge are not limited to emissions trading. The same goes for technical standards and other types of policies and measures (see below).

Fifth, the Kyoto parties should consider in which climate-relevant fields other than actual emissions regulation they might usefully cooperate with the Americans on the short term. The obvious answer is science and technology. The knowledge and shared understanding built through cooperation in scientific research, monitoring and assessment of climate change is a crucial foundation for climate policy and should be given a high priority. As discussed in section 1 above, technology research, development and demonstration is the area of climate policy where the potential for cooperation with the United States currently looks best. Both the United States and European countries could usefully increase their efforts in this field. Given the discrepancy between projected energy supply and demand and what would be needed to keep global warming in check, governments worldwide spend remarkably little money on energy research and development. From the mid 1980s to the late 1990s – the very period that the global warming problem was taken up by political bodies – spending on energy R&D was in fact considerably *reduced* (Dooley et al. 1998; Dooley and Runci 1999). One proposed remedy is to negotiate a “R&D protocol” to the UNFCCC, where countries commit to specific levels of funding for collaborative research and development on cleaner energy technologies (Barret 2003). It is, however, not clear that such a formal agreement is necessary to promote R&D spending. Since just nine OECD countries account for 95 percent of the world’s investments in energy research and development (Dooley et al. 1998), negotiations involving all UN members may not be the most effective approach.

A very simple and interesting proposal comes from Nigel Purvis, formerly a senior U.S. State Department official now at Resources for the Future. Purvis proposes that “Europe and Japan should challenge the United States to increase funding for international clean-energy research and development programs and for engaging major developing countries by pledging to match any new U.S. climate change expenditures (beyond what Bush has already announced) up to an additional \$10 billion a year” (Purvis 2004). Increased government funding for climate-relevant R&D is a very useful long-term contribution to solving the problem, but cannot replace emissions control policies. While inviting the United States to a friendly competition on spending levels, Europe should also insist that emissions caps or similar incentives are necessary to motivate the private sector to invest in R&D, and to actually use existing emissions-reducing technology.

An alternative type of incentive to stimulate innovation would be technology or performance standards for specific sectors or activities. Most likely, the current administration and congressional majority will be equally reluctant to enact such policies as binding overall emissions caps. However it might be worthwhile to consider challenging the United States to consider such alternative modes of cooperation. One useful area of cooperation might be international emissions standards for new automobiles, similar to those recently announced by California, or fuel economy standards similar to the federal U.S. CAFE standards (An and Sauer 2004). This is not the most cost-effective form of climate policy, but a clear benefit is that countries producing cars and trucks (including the United States) would have an incentive to participate in order to conform to and take part in defining the standards applying to major overseas markets (Barret 2003). Common policies to increase the relative shares that renewable or “CO<sub>2</sub>-free” sources represent in the total power generated might be another possibility. “Renewable Portfolio Standard” laws are already in place in several U.S. states,

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<sup>7</sup> Thanks to Christina Voigt, Department of Public and International Law, University of Oslo, for useful comments regarding the legal aspects of linking different emissions trading systems.

policies similar to the “Green Certificates” schemes considered in Norway and other European countries (Menz 2004).

Sixth, the Kyoto parties should reconsider their vision of the future international climate regime and how the United States might eventually reengage. One important debate centers on the nature of commitments. Right now is the time to consider carefully if different types of agreements than the Kyoto Protocol may be better suited for broad international cooperation – and for engaging the United States whenever an opportunity arrives (Aldy et al. 2003; Torvanger et al. 2004). Another interesting question pertains to the timing of domestic versus international climate policy processes. In the event of a future policy shift in the United States, it could be more important for European governments to push for domestic U.S. action to limit its greenhouse gas emissions, than to call for negotiations and international commitments immediately. For several reasons it might be better both for the United States and its negotiating partners if the United States developed a credible domestic policy to control greenhouse gas emissions *before* it negotiates binding international commitments. For one thing, this may prevent unnecessary delays. Agreeing on and ratifying a new protocol under the UNFCCC will take a lot of time. So will guiding a credible plan to control greenhouse gases through the U.S. political system. The risk is that each of the two processes will experience prolonged breaks as it waits for the outcomes of other process. Starting with a domestic policy may also give negotiating partners a clearer picture of how ambitious targets are politically feasible for the United States. Furthermore, this strategy may help avoid a return to the hardened fronts between the United States and developing countries on who moves first. Negotiations under the auspices of the UN inevitably focus attention on issues of burden-sharing and fairness between countries. Making a voluntary, unilateral effort to avoid a global risk may seem less “unfair” to U.S. actors than entering a treaty that only commits some of the parties to action. Moreover, this may demonstrate the good will of the United States and restore trust between international negotiating partners. Starting by implementing policies to mitigate a global problem rather than by negotiating targets is by no means unheard of. One example would be the ozone issue, where substantial action to phase out CFCs by the United States and a handful of other countries came before the binding reduction targets in the Montreal Protocol (Benedick 2001).

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