German Foreign Policy in Dialogue

Newsletter - Issue 06

Climate Change After Marrakech: The Role of Europe in the Global Arena

Detlef Sprinz (Guest Editor)
Based in Trier, Germany, the Internet-project www.deutsche-aussenpolitik.de operates as the autonomous arm on German Foreign Policy of the Chair of International Relations at Trier University. Founded in 1998, the thrust of the project’s work is to respond to the increasing interest in Germany's foreign policy by improving research, analysis and teaching in this field through the innovative use of the internet. The project also aims at strengthening the democratic discourse on German foreign policy in the context of an integrating Europe by stimulating debate between researchers and analysts, decision-makers and the wider public.

By organising a series of binational seminars in Poland, Great Britain, France and a Scandinavian country on the subject of German foreign policy in an integrating Europe, the project intends to enhance the quality and competitiveness of political science and political scientists in Europe by europeanising the curriculum of the former and by developing the intercultural competence of the latter.

The project team is presently headed by Wolfgang Brauner and Sebastian Harnisch. Current staff members are Lotte Frach, Holger Pansch, Stefan Werland and Christof Zintel. Overall responsibility for the project lies with Prof. Hanns W. Maull.
German Foreign Policy in Dialogue

Contents

Preface  
by Wolfgang Brauner  
Page 5

Editorial: Climate Change After Marrakech: The Role of Europe in the Global Arena  
by Detlef Sprinz  
Page 6

I. Climate Change After Marrakech: The Role of Europe in the Global Arena

1. The UK and European Union: Britannia Waives the Rules?  
by Michael Grubb  
Page 9

2. Germany: European Leadership, Active Climate Policy and Wall-Fall Profits  
by Detlef Sprinz  
Page 13

3. India: A Climate for Business and Environment  
by Vinayak Rao  
Page 16

4. Japan: Struggling to Achieve 6%  
by Yasuko Kameyama  
Page 19

5. A View from the United States: COP-7 and the Kyoto Protocol  
by Miranda A. Schreurs  
Page 22

II. Book Review  
by Benito Müller  
Page 26

LUTERBACHER, Urs and Detlef F. SPRINZ (eds): International Relations and Global Climate Change, London and Cambridge 2001

III. Online Resources

1. Climate Policy  
29

1.1 International Climate Policy  
29

1.2 European Climate Policy  
30

1.3 German Climate Policy  
31

2. German Foreign Policy  
33

IV. Offline Resources

1. Climate Policy  
35

2. German Foreign Policy  
37

About the Authors  
38
Preface

by Wolfgang Brauner

This issue of German foreign policy in focus on the current topic of international climate policy was produced in cooperation with the Potsdam Institute for Climate Impact Research and edited by Detlef Sprinz. Contrary to our preceding issues, this Newsletter does not offer different national perspectives on German foreign policy, but rather focuses on the key role of the European Union in the Marrakech negotiations on the Kyoto Protocol. Beyond that it offers a succinct overview of recent developments in international climate policy, combining contributions on the policies of Germany, the United Kingdom, the United States, Japan and India. What this newsletter has in common with the previous issues is its emphasis on the crucial role of the European dimension for German foreign policy. In a recent speech on the role of the nation state in international environmental policy, Jürgen Trittin offered a description of this "Europeanisation" of German "foreign" policy, which also highlights one of the key findings of this Newsletter:

"In such negotiations, Germany does not act as a nation state and can only play an active role within the EU. (...) I don't see this as a loss of power of the nation state. On the contrary, as far as environmental policy is concerned, it has been extraordinarily useful that the EU speaks with one voice and acts, at global environmental conferences like Bonn or Marrakech, as a strong nation state. This way, we have been able to continue the Kyoto process in Bonn despite the blockade by the United States." 1

Hence, we hope that this newsletter finds your interest and we would like to thank Detlef Sprinz of the Potsdam Institute for Climate Impact Research and his colleagues for their excellent contributions.

---

Editorial: Climate Change After Marrakech: The Role of Europe in the Global Arena

by Detlef Sprinz

The seventh Conference of the Parties of the UN Framework Convention on Climate Change has concluded in November 2001 a set of specifications to the Kyoto Protocol which has given rise to hopes that the latter will be ratified in 2002 – on time for the 2002 World Summit on Sustainable Development. At a time when many countries are planning or undergoing the legislative process of ratifying the Kyoto Protocol, it is appropriate to take stock of what has been achieved on combating a global problem of high priority to many industrialized country governments, especially in Europe. While the European leadership role has become apparent during the past year, this newsletter will combine European perspectives on global climate change policy with perspectives from major key players outside Europe.

The fears of unwanted climate change are not particularly new, yet media commentary puts them at center stage as a long-term challenge to humankind. This introductory article will provide a very brief historical overview and introduce the contributions to follow.

Historical Overview

The world’s climate has changed for millennia, but the chance of humans influencing its course originate with the onset of industrialization and associated emissions of greenhouse gases, esp. carbon dioxide, methane, nitrous oxides and others. Scientific conferences in the 1980s raised the issue of climate change which gave way to intergovernmental conferences, and subsequently turned to attempts to regulate the human component of the so-called greenhouse effect. The naturally occurring greenhouse effect itself is necessary to sustain human life, yet human additions to the greenhouse effect may throw this equilibrium off balance – resulting in various forms of human suffering for many and benefits for some. This expectation gave both rise to the first set of assessments by the Intergovernmental Panel on Climate Change (IPCC), essentially a scientific-political consensus mechanism on the causes and impacts of as well as responses to climate change, and negotiations on a climate convention within in the UN. These negotiations resulted in the UN Framework Convention on Climate Change\(^2\) on occasion of the 1992 Rio de Janeiro Conference on Environment and Development. As the latter stipulated an ultimate goal (“prevent dangerous interference with the climate system…”) and mostly mandated reporting requirements, the members to the UNFCCC decided to negotiate a first emission reduction protocol.

The first Conference of the Parties (COP-1) at Berlin in 1995 took the decision to negotiate such a protocol to the convention within a limited time frame. Already at Berlin it was decided that the industrialized countries, whose emissions gave rise to the human-induced effect on the climate system, would have to go ahead of developing countries with limitations on their greenhouse gas emissions. This set the frame for negotiations over the years to come, resulting in the 1997 Kyoto Protocol. This protocol mandates emission reductions of six greenhouse gases or groups of gases to be accomplished between the years 2008-2012. In particular, the

\(^2\) UNFCCC, [http://www.unfccc.int](http://www.unfccc.int)
European Union agreed to reduce its emissions during this period by 8% relative to 1990 emissions, the USA by 7%, and Japan by 6%. Other countries agreed to milder emissions reductions (e.g., Russia: 0%), whereas some other countries are allowed to increase their emissions. As the Kyoto Protocol is essentially a document agreed upon under the duress of time to salvage the climate issue on the world’s agenda, the following fourth Conference of the Parties at Buenos Aires (COP-4) in 1998 agreed upon the Buenos Aires Plan of Action to specify the details of the Kyoto Protocol by the year 2000. It took another three years to accomplish this, including initial failure at COP-6 (part I) at The Hague in late 2000, resumption of the meeting at Bonn in July 2001 (COP-6, part II) – which led to the so-called Bonn Agreements on basic architecture - and final agreement at Marrakech in November 2001 (COP-7) for the finer print. Yet details mattered, and the Marrakech meeting appeared, at times, to end in failure.

None of the US governments over the past decade was particularly eager to put stringent limitations on its greenhouse gas emissions into effect. The Bush senior government used its power at Rio de Janeiro to limit the forcefulness of the UNFCCC, Clinton negotiated on the Kyoto Protocol for which he never commanded the required Senate majority, and the Bush junior government informed the rest of the world in spring 2001 that it disassociates itself from the Kyoto Protocol (but not the UNFCCC, which the USA has ratified). Given much stronger public demand for climate protection in Europe over the past decade, it fell to the European Union to exercise credible leadership and assemble required majorities to conclude the negotiations on the fine print of the Kyoto Protocol and give rise to expectations that it can come into effect. This proved to be a challenge to the European Union which so often, outside common market and related policies, is subject to salami tactics by skillful outside negotiators. At Kyoto, the USA managed to get all it wanted – despite fierce opposition from a disorganized EU – except for (absolute or relative) limitations on the emissions of large developing countries. Even at The Hague Conference of the Parties in 2000, the EU essentially looked disunited when push came to shove in the final rounds of negotiations with the USA, yet since the negotiation on the Bonn Agreements, the European Union learnt to become a credible force in global negotiations outside its core economic portfolio.

The recently agreed upon “Marrakech Agreements” included what some observers consider to be a stringent compliance mechanism with a 30% fine for non-compliance, agreements on the so-called Kyoto Mechanisms in conjunction with reporting requirements and acceptance of non-compliance procedures, the use of sink management (e.g., carbon absorption of forests and other vegetated lands) to offset industrial emissions, as well as three funds to assist the developing countries in reducing their emissions and preparing them for adaptation to climate change.

Overview of the Contributions

The contributions to follow include two from European Union member countries, namely the UK and Germany as well as three perspectives from other crucial global players on climate change, namely India, Japan, and the USA.

The European contributions highlight the strong linkage between national policies and those furthered on the European Union level with both the UK and Germany shouldering the net emission obligations the

3 see Annex B of the Kyoto Protocol for details, http://www.unfccc.int
4 These include emissions trading, joint implementation, and the Clean Development Mechanism – all of which are geared to either trade unused greenhouse gas permits or undertake greenhouse gas reductions at lower costs in other countries as compared to domestic emission reductions
European Union accepted in the Kyoto Protocol. For a while, as Michael Grubb demonstrates, the UK was strongly torn between its traditional role as a mediator in transatlantic relationships and being a core member of the European Union, but it appears that it is now “one of the team, and an effective member” of the European contingent once the USA removed itself from the negotiation table. By contrast, Germany, as Detlef Sprinz suggests, has more consistently played the European card to influence global climate politics, assisted, in part, by wall fall profits in the aftermath of reunification as well as more recent policies.

The three non-European perspectives represent crucial countries needed for the pursuit of global climate policy, namely India, Japan, and the USA.

The Indian perspective by Vinayak Rao clearly outlines the different priorities which developing countries have, esp. with respect to poverty alleviation and economic development, and concludes that it would be premature for industrialized countries to expect the developing countries to participate in emission reduction policies. Furthermore, the contribution highlights the challenge and opportunity to combine policies to pursue poverty alleviation and sustainable development goals simultaneously.

Our Japanese contribution by Yasuko Kameyama reflects on the political balance which Japan has to strike between its environmental ambitions on climate policy and its sincerity at complying with its international obligations under the Kyoto Protocol. More generally, Europe is seen as being less conservative in assuming obligations on reductions of greenhouse gases as well as accepting enforcement of non-compliance as compared to Japan.

Finally, our US contribution by Miranda Schreurs deals with the most important current emitter of greenhouse gases which has chosen in Spring 2001 to abstain from the further development of the Kyoto Protocol, reinforced by the terrorist attacks on September 11, 2001. The USA promised to outline an alternative architecture to the approach taken by the Kyoto Protocol, yet the world is still waiting for this to happen. Still, this article highlights how much of an internal debate in the various political institutions of the USA is taking place and is likely to reengage the USA in global climate policy in the long run.

Global climate policy has reached an agreement on the architecture of how to limit and reduce greenhouse gas emissions in the industrialized world. Yet it remains unclear whether and how well this architecture will hold under the duress of daily practice. The developing countries are likely to become the main emitters of greenhouse gases later this century, but they have yet to join the global effort at limiting the effects of climate change, and this will involve complicated negotiations on political priorities, equity concerns, and political credibility. It is prudent to assume that such negotiations are likely to be more challenging than the negotiations on the Kyoto Protocol until Marrakech. May they begin in earnest sooner rather than later.

In the contributions to follow, all authors act in their private capacity and their institution are mentioned for identification purposes only.
I. Climate Change After Marrakech: The Role of Europe in the Global Arena

1. The UK and European Union: Britannia Waives the Rules?

by Michael Grubb

During the 1990s, the UK gradually sought to position itself as a leader on climate change, a tendency that can be traced to many factors. By the year 2001, the dominant consensus in the UK was that climate change was a serious problem, that Kyoto was the right way forward, that the UK could meet and indeed exceed its Kyoto target of −12.5% under the EU bubble agreement, and that the technological innovation associated with meeting this target might well prove beneficial for the UK economy in the longer term and deeper cuts are sought. In this sense, the UK has moved steadily towards and indeed increasingly helped to define the European mainstream. The UK has worked particularly closely with Germany in the broader context of European climate change policy – especially in the recent crisis surrounding Kyoto, which has raised climate policy to new political heights. With the ‘Kyoto crisis’ of 2001, this has culminated in the UK emerging as a leading force within Europe, standing squarely up to the US position on Kyoto – not an accustomed position.

The Kyoto crisis and the transformation of the EU as an international actor

Until 2001, the EU’s role in climate change was beset by paradoxes and contradictions. Throughout the 1990s it had pretensions to global leadership, and it did lead in the sense of always being at the forefront of efforts to strengthen the international commitments. Yet many critics questioned whether the EU’s ambitions were either matched by political skill or realism internationally, or by capacity to implement internally. In reality, the Kyoto Protocol was principally as designed by the US, and arguably the EU’s greatest ‘success’ in Kyoto – pushing the US to a much stronger commitment than it would otherwise have agreed – has been a principal cause of many of the subsequent problems, and ultimately rejection of the agreement by the US. Progress on internal policy has also been relatively slow and faltering, far behind the rhetoric.

The collapse of The Hague negotiations in 2000 was a huge shock to European policymakers. From any logical standpoint, it made no sense to allow the negotiations to collapse on a relatively small (by the end) difference over carbon sinks, when there was a good prospect that the deal was more favorable than any that could be realistically expected under a successor US administration. It laid bare for all to see the fundamental problems of EU policymaking in the international negotiations. The green rhetoric of refusing to compromise ‘environmental integrity’ suddenly looked hollow and irresponsible when the alternative to compromise was revealed as potentially nothing.

Just as the EU was regrouping and digesting the lessons from The Hague, President Bush announced his opposition to the Protocol. The way in which this was handled, with no discussion or consultation and an arrogance that shocked (Condeleeza Rice announced to a startled meeting of EU diplomats in Washington that ‘Kyoto is dead’), was seen as a direct assault on the integrity of the EU and indeed the international system. It

---

6 See ‘Climactic collapse at the Hague: what happened, why and where do we go from here?’, in International Affairs, Blackwell, April, 2001, and other papers in that Special Issue.
was clear that the EU was the only actor powerful enough to save the Kyoto Protocol. Most doubted that it could – or even whether in reality it wanted to. Thus, the Kyoto crisis in fact became a test of the EU itself.

Between The Hague and Bonn, the EU underwent a remarkable political transformation. The EU Troika structure was changed, to include the European Commission to give greater continuity in the lead negotiating team. Perhaps more remarkable was the whole change in approach, for which some credit must go to the Swedish Presidency. Previously, the EU had expended most of its energy on internal negotiations, often on points of detail and symbolic fights that were of little relevance to the broad outcome of negotiations; given its resources, the EU spent relatively little time building relationships with other countries. In the aftermath of the Bush announcement, the Swedish presidency convened close but quick consultations amongst the leading governments, working closely also with the Belgian government that was to inherit the Presidency for Bonn. Within a couple of weeks, the EU had dispatched a high-level mission to other key capitals including Moscow, Tehran, Beijing, and Tokyo. They returned with a united conviction that there was a chance to save the Kyoto Protocol, and focused intently upon that.

At the Gothenburg summit in June the EU extracted a public promise from President Bush that, should the rest of the world choose to go ahead, the US would not interfere. The Japanese remained hopeful up to the last moment that the President would change his mind, to save Japan from the awful (to them) dilemma of having to choose between Kyoto and the US embrace. The world remained obsessed with the US position right up until Bonn itself, but having arrived there, was faced with a stark task of trying to negotiate an agreement that some countries doubted made sense without US participation – but knowing that the US had produced no alternative and indeed was unlikely to do so. The EU – working closely with the G77 headed by the equally capable and focused Iranian delegation - drove the negotiating process forward at a ferocious pace, seeking all avenues to possible compromise, save refusal to sacrifice the fundamental principle that the legally binding nature of the Kyoto targets had to be maintained. The result was the Bonn Agreement. The EU maintained its cohesiveness and commitment through to Marrakech, where again it was pivotal in orchestrating the negotiations to a point of final agreement on the legal texts required for ratification.

The fact that the EU rose to the challenge has changed the political landscape – and also proved a watershed for the UK’s role in European climate change affairs.

The UK in Europe

Traditionally, as in many other policy areas, the UK in climate change policy used to be somewhat adrift from the European mainstream, reaching somewhat across the Atlantic. In negotiating the UNFCCC, the UK brokered the unwieldy compromise in Article 4.2, between the European desire for hard targets and the US refusal to have any mention of targets. In Kyoto, with the UK in practice leading the Troika, the UK was pivotal in gaining EU acquiescence for US-led ideas on key flexibilities in the treaty, not least emissions trading. At The Hague, the UK – this time without any mandate – tried to rescue the package in small talks with the US. A substantial instinct in the UK, following President Bush’s rejection, was to seek grounds for compromise with the US. The British efforts to persuade the US back into Kyoto fell on stony ground however. Some traditionalist voices then argued that a Treaty without the US would be unworkable and pointless; and indeed that more broadly the UK should seek to maintain its ‘special relationship’ by indulging the US and exploring alternatives. Only a few weeks before President Bush’s announcement, the Prime Minister had made a
strong speech in favor of stronger action on climate change in general, and support for Kyoto in particular, and he was also wary of the traditional taunt of UK premiers being labeled as ‘poodles’ of the US. The lack of any serious alternative proposed structure for an agreement left little room for fudging the issue. As one official later remarked, there was indeed an ‘outbreak of poodle-ism in some parts of the UK Foreign Office - but it was quickly squashed’. The UK stood firm on the principle that Kyoto was the right way forward. In public, Tony Blair sought to deflect public fury about the US position with conciliatory noises; in private, he told President Bush firmly that climate change was serious and Kyoto was the right approach, as well as the politically legitimate approach based upon long global negotiations; and that the UK, in Europe, and with most other countries, fully intended to stick with it.

The transformation of the EU between The Hague and Bonn thus also helped to cement the UK in Europe. In Bonn there were no freelance initiatives, and no griping at ceding the leading role to and acting in concert with the Belgian presidency. The UK was firmly ‘one of the team’, and an effective member.

UK domestic developments

Inevitably, European collaboration is both more directly relevant, and comes easier, on the international stage than for domestic policy. The UK has – in common with many other European countries – tended to develop its own distinctive set of domestic policies to tackle greenhouse gas emissions. UK electricity liberalization, pursued of course for entirely other reasons, had the happy consequence of leading to large reductions in emissions as coal generation was replaced by natural gas; it is estimated that about half the total reductions since 1990 could be attributed to this. Some enterprising officials also seized the opportunity of electricity liberalization, and a shambolic debate about protecting nuclear power in the liberalized system, to introduce the ‘non-fossil fuel obligation’ (NFFO) that resulted in market-based support primarily for renewable energy. Another by-product of the liberalization process was the Energy Savings Trust, funded primarily from the regional electricity supply companies and focused upon promoting energy efficiency in the domestic and transport sectors.

As renewable energy grew during the 1990s, and the NFFO expired, the government established a target to achieve 10% of UK electricity supplies from renewables by 2010, and moved to a new system of tradable renewable energy credit supports to achieve this. It also began to put more substantial money towards supporting demonstration of renewable energy technologies. In April 2002, the government established the UK Carbon Trust, charged by the Prime Minister with fostering transition in the business sector towards a low carbon economy.

By far the most controversial element of UK implementation – indeed, probably the most controversial policy issue for business in the whole of the Labour Party’s first term - was the ‘climate levy’, a tax levied upon industrial energy use. Strong lobbying failed to dislodge the tax, but it did succeed in gaining various derogations (of 80%) for energy-intensive industries in return for negotiated energy efficiency target improvements. From this experience, in turn, was born business-led proposals for a quasi-emissions trading scheme, in which the government gives financial inducements for companies to opt in to a cap-and-trade system, that excludes power production.

---

7 Nick Eyre, *Carbon reduction in the real world: how the UK will surpass its Kyoto obligations*, Climate Policy, Elsevier, 2001, Vol.1 no.3, pp.309-326. This paper gives a good overview of UK policy developments
This last area is the one that perhaps gives the most scope to inject a new division between UK and continental Europe. The UK system, which comes into operation in early 2002, is clearly at odds with the European for a mandatory cap-and-trade system including power generation that were finally presented as a specific proposed Directive – a turning point also in the credibility of EU credibility in terms of implementation – in 2001. In the eyes of many, the UK system would not be adequate to address emissions in the longer term and should only be considered as a transitional system; but it already has its fierce defenders. The newfound cozy relationship between the UK and the rest of European climate policy could yet come unstuck as Europe moves towards implementation.

Overall however, for the first time since negotiations began in 1991, EU leadership on climate change has an international legitimacy that it previously lacked – and with the UK integrated more than ever before. The EU has acquired a stark global responsibility and climate change could even be seen as an issue of European identity and credibility. The inevitable challenges of implementation will be set within that reality.
2. Germany: European Leadership, Active Climate Policy and Wall-Fall Profits

by Detlef Sprinz

In contrast to many other countries, Germany has little of a vibrant debate on climate change issues – although it is the major emitter of greenhouse gases (GHGs) in Europe. Much of the political discussions were undertaken on occasion of two Enquête Commissions of the German Bundestag (lower chamber) in the late 1980s and early 1990s. Building on a recommendation of the first Enquête Commission, the German federal government announced in 1990 that the national goal would be to reduce energy-related CO₂ emissions by 25% between 1987 and 2005.\textsuperscript{8} The political goal was further corroborated on occasion of the first Conference of the Parties in Berlin in 1995 when former Chancellor Kohl announced that the reunited Germany would reduce its total CO₂ emissions by 25% between 1990 and 2005. As a result of wall-fall profits, i.e., the emission reductions that materialized from the restructuring of the energy system of East Germany, as well as additional policies, Germany has reduced its CO₂ emissions by 18.7% between 1990 and 1999. In combination with additional measures, this will allow Germany to accomplish its 21% reduction goal until the year 2012 as part of the EU-internal distribution formula of its obligations under the Kyoto Protocol. Does this imply that Germany comes close to the ideal type of a frontrunner on climate policy? Can the impressive track record be extrapolated into the future?

The German Political Setting

German politics is characterized as being corporatist as well as consensus-driven. Both applies to German climate policy and is best reflected in the work of the various Enquête commissions in the late 1980s and early 1990s. Enquête commissions bring together members of parliament of all parties with a broad set of academics to ponder a policy issue of broader concern. The first of the two Enquête commissions relevant to climate change set the tone for the German national goal. Yet little happened for quite some time in terms of adopting a set of policies to accomplish the national goal. Until now, the unforeseeable unification of Germany in 1990 provided roughly half of the emission reductions to implement the national emission reduction goal. Yet it also became apparent in the mid-1990s that these “wall-fall profits” would not be sufficient to achieve the 25% reductions until 2005. The additional policies adopted in the late 1990s, including the co-generation of heat and electricity, energy savings programs for new and existing buildings, promotion of renewable energy production as well as the upgraded voluntary agreement between the German government and the peak associations of German industry are geared to make the accomplishment of the 25% goal feasible. These measures do stand a fair chance to be on target, but a true lead country would wish to accomplish goals by design, not partly by the luck of history.

Is everything going well for German climate policy? The European Academy Bad Neuenahr-Ahrweiler suggests in a forthcoming study that Germany lacks a conclusive climate change policy. A long-term problem needs a long-term strategy which provides orientation for industry, research, and the mass public; the German public expects action but is quite unclear which option to favor – perhaps this is a reflection of the absence of a contemporary debate on climate policy. Moreover, the first voluntary agreement by German industry in 1995/1996 was geared to reduce the energy-specific CO₂ emissions by 20% between 1990 and 2005. Yet the

\textsuperscript{8} As CO₂ emissions make up ca. 90% of all greenhouse gas emissions, I will solely concentrate on this pollutant.
German Council of Environmental Advisors found this declaration to have no effect in its year 2000 report, although the voluntary agreement contains a monitoring component. It is hoped that the upgraded voluntary agreement concluded in the year 2000 between the German industry and the federal government to reduce the energy-specific CO$_2$ emissions of the participating industries between 1990 and 2012 by 35% will be more successful. It presently looks more like a smartly designed pre-emptive shield for industry and is a persuasive reminder of the political astuteness of industry. While environmental NGOs accompany the national and international negotiations and hold a strong influence over the media, they lack political clout when it matters most. The ecological tax reform, initiated in 1999, increases the tax burden on fossil fuel use – and exempts much of energy-intensive industries. While this may be the price to be paid to succeed in getting a larger agenda off the ground, it remains unclear how larger emission reductions of the order of 50% or more can be accomplished in Germany – except if path-breaking technological innovations occur. It is the absence of a broader discourse (beyond the specialists) leads to a situation where everyone can be reasonably content with the policies undertaken and the emission reductions accomplished. It is too quiet on the (political) climate front, especially since climate strategies need a long lead-time.

The Role of the Kyoto Protocol

The president of the Bonn Agreements and failed sixth conference of the parties at Den Hague, Mr. Pronk, insisted that the Kyoto Protocol is the only show in town. The US government has not yet offered any alternative design how global climate policy can be advanced in the years to come. There has been clearly a paucity of propagating alternatives that are politically feasible. No wonder, the German government and much of the EU are staunch supporters of the Kyoto Protocol, even if compromises are necessary to make it acceptable to a sufficient number of countries for ratification. The ultimate question arises: Which compromises have to be made for the developing countries to accept relative or absolute emission reductions and for the developed countries to accept deeps cuts in return?

Developing countries have made it clear that poverty alleviation and industrial development are more important to them than the risks created by climate change – the latter (and some suggest also the former) caused by the developed countries. As a consequence, developing countries eschew the discussion on substantive obligation while the developed countries are expected to contribute to a global good they will not control as decisively in the future. Developing their countries the way the now industrialized countries did in the past is not a reasonable option – too much was learnt in the fields of energy efficiency, industry structure, and public health. There is a clear option many developed countries will have once they perceive that there is no beneficial agreement in sight on limiting the emissions of developing countries, even if provisions are made for burden sharing: switching from an emphasis on mitigation to adaptation, where the benefits can be “privatized” at the national and European levels. Developing countries should take this into account, esp. if deep cuts in emissions require parties and societal groups to spend precious political capital. Conversely, Germany and the EU should spend more resources on initiating more awareness of climate impacts in developing countries, as they have done on environmental issues in East Central Europe after 1990 and, more recently, in India (see also the contribution to follow).
Future Climate Policy and the Role of Europe

The global agreements on climate change are the result of negotiations among powerful blocks of countries. Encouraging the EU, the lead group in view of US reluctance over the past decade and self-imposed abstention on global climate policy since spring 2001, to strengthen its climate policy is clearly part of the German strategy. In fact, the EU-Germany link is a fruitful symbiosis for both. For the German government, the EU is the channel to aggregate influence, as Germany by itself would be rather powerless on the global level. And the EU desperately needs the German emission reductions to comply with its emission reduction goal, esp. the obligations accepted at Kyoto. It is Germany and the U.K. that essentially will shoulder nearly all of the net emission reductions necessary to accomplish the EU obligation of -8% under the Kyoto Protocol. Both countries allow the EU to strike a delicate balance between industrializing European latecomers in need of emission increases and more enthusiastic advanced European economies and polities. Without Germany’s enthusiasm, skillful climate diplomacy, policies undertaken and wall-fall profits, the EU would lose its leadership role on climate politics.

Will Europe be able to embrace deep cuts in emissions? This is yet too difficult a question to answer with any confidence. The German government has clear expectations about its policies until the year 2010 and is exploring options for emission reductions in the order of 45% until 2020. This is ambitious, however, German voters may turn out to favor such goals. Will they? In the fall of 2000, impatient drivers of cars and trucks made it known in various European countries that the (political) price of gasoline – over 80% of which is taxes – are not acceptable and went to the streets. Most European governments conceded, directly or indirectly. This certainly sent a message to the German and other European governments that it will not be easy to increase the political price of fossil fuels much further. Yet consumers essentially accepted the new prices: No threshold has been reached which would radically alter their behavior. Germany is a frontrunner on climate policy – with some success, but it seems premature to extrapolate the past experience too long into the future. It may be the fine-tuning of political resistance combined with the clearer demonstration of the likely profits from a transition to a carbon-poorer future that politicians have to master if the global good is to be furthered. Should this fail, the alternative will be clear: Rich countries, including Germany, are not particularly vulnerable to the effects of climate change. They will be able to afford adaptation. Until now, the developed countries made concessions such that the developing countries would not block global climate agreements. The forward looking question may well read, Will the developing countries make an offer the industrialized countries cannot reasonably reject, esp. since the developing countries are most vulnerable to the impacts of climate change?
3. India: A Climate for Business and Environment

by Vinayak Rao

For a country with one billion plus population, climate change attracts very little attention in India among the media and the policy-makers. The talk about climate change is largely confined to a handful of specialists, non-governmental organizations and think tanks. The two major think tanks in the Indian climate policy debate were conspicuous by their absence in Marrakech. It may be attributed, partly, to the sense of apathy generated after The Hague and the Bonn Conferences of the Parties in 2000/2001.

Despite a 300 million strong middle class (roughly equivalent to the entire population of Europe), the emergence of local environmental concerns such as air and water pollution to the forefront of political debate in India is a very recent phenomenon. Global environmental issues such as climate change and ozone depletion certainly are not national priorities. Economic growth rates, poverty alleviation, information technology, a second-generation of market reforms to further liberalization and India’s integration with the global economy are the kind of priorities that the country is grappling with. Notwithstanding this, the government is committed to participate in the international climate negotiations to both protect its national interests as well as contribute to a global accord on climate change.

India as a developing country does not have any commitments or responsibilities at present for reducing the emissions of greenhouse gases such as carbon dioxide. However, the country’s leadership is acutely aware of the emerging pressures in terms of its future emission trajectories given the country’s pace of development. Politically, the abandonment of the Kyoto Protocol by the United States citing, among other things, reasons of non-participation by “major population centers” and “fast growing economies” such as India and China in a global climate regime has highlighted the need to be alert to the ongoing climate negotiations.

In larger political terms, the Indian government has taken a consistent position ever since the early 1990s that the issue of equity must be squarely addressed in global climate negotiations. As an initial bargaining position, India has strongly advocated for equity based on per capita emissions in climate negotiations - a position that has remained unchanged so far.

While the rich, developed countries are responsible for the historical and current levels of greenhouse gas emissions, it is the poor, developing countries that are most vulnerable to the risks of climate change in terms of its impacts on agriculture, water resources and health. For instance, the recent news of an entire population of the island of Tuvalu being evacuated because of sea-level rise and the consequent pressure on New Zealand to accept them is clearly a sign of things to come: human migration and environmental refugees. One may ask here, is the developed world prepared to talk about a quota for such migration in the future? And how does one address the issue of responsibility to future generations, which again is enshrined in the Climate Convention?9

The Climate Convention adopted the notion of common but differentiated responsibility, recognizing that while climate change is a global problem, there were clear asymmetries between the developed and developing countries in terms of both the past and present contributions to the problem as well as the resources to respond to it.

---

The Right to Development: Survival Versus Luxury Emissions

The recognition of the right to development by developing countries allows India to reject any kind of limitations on its emissions at the current stage of its development. The top priority is to meet the basic human needs of its vast population. Quite obviously, such development policy is bound to lead to a rise in its carbon emissions in the near future.

Influential contributions to the public debate in India have even categorized emissions in poor countries as survival emissions where the priority is given to “livelihood concerns”, and the emissions in rich countries as luxury emissions where the priority is given to “lifestyle concerns”.10

The first political storm was weathered by India and other developing countries when during the very first climate summit in Berlin (1995), an abortive German Proposal had tried to introduce the concept of voluntary commitments for major developing countries like India and China. One may even argue that a great deal of the equity argumentation lost its punch by December 1997 when the concept of “assigned amount units” crept into the Kyoto Protocol. In the view of this writer, quite clearly, the idea of a few countries meeting their Kyoto commitments – even in a very watered down version, thanks to the Bonn Agreement – in the absence of an internationally negotiated share of every country to the global atmospheric space is both a procedural and substantive loophole in the current negotiation process. The failure to deal with the current mismatch between causes (developed world, mostly) and the differentiated impacts (in developing countries mostly) is another glaring lacuna in the current state of information for climate-change related decision-making.

Most developing countries, including the leaders among them such as India, China, and Brazil have witnessed with great dismay the pace of post-Kyoto climate negotiations. For countries like India, the Climate Summit in Marrakech meant another event in the chain of events trying to define the implementation of the Kyoto Protocol. If there is one crucial element available to developing countries in the Kyoto Protocol, it is the Clean Development Mechanism (CDM). Simply put, most developing countries see the CDM as a mechanism to transfer some financial and technological resources to the poor, developing countries and help them attain a better local environment in exchange for assisting the rich, developed countries in achieving compliance with their Kyoto commitments. It is generally felt that some of the contentious issues such as equity, additionality and supplementarity that plagued the post-Kyoto negotiations have been addressed at Marrakech.11

For nearly four years now, the means to operationalize the Clean Development Mechanism had proved elusive when in fact the Kyoto Protocol expected CDM projects to take off by 01 January 2000. By this yardstick alone, the accomplishment of a Kyoto rulebook at Marrakech is significant progress. It remains to be seen if this will spur the government and business in India to think big in terms of clean energy projects in the days to come. Also, at a time when countries like India fear that non-participation by the US will restrict the size of the CDM market, it is a ripe moment for Germany and the other major European countries to exhibit leadership in building robust CDM partnerships with India and other developing countries.

It needs to be emphasized here that positive learning from the CDM, however small, will go a long way in preparing developing countries such as India to undertake a bold, proactive stance in global climate policy


making. This is most likely to be a political necessity and an environmental virtue by the time we arrive in second commitment phase post-2012. To reach this stage confidently, the need to build the Indian knowledge base on global climate change is a strategic imperative.

In terms of international cooperation, the small but significant steps undertaken in India to improve and enrich the information base for climate decision-making needs to be further augmented. For example, the Indo-French Centre for Environmental Research (IFCER) is now being developed as a multi-institutional platform for sustained collaboration between Indian and French scientists with a goal to develop synergy in critical areas of climate and environmental research.  

Similarly, an Indo-UK research program on the impacts of climate change in India along with UK’s Hadley Centre for Climate Prediction and Research with a commitment from UK government to provide 650,000 pound sterling to fund the initial studies and program management is a welcome step.  

Leadership Challenge: Finding Synergy Between Environment and Business

At another level, during President Clinton’s visit to India in early 2000, the US Agency for International Development (USAID) committed $ 45 million to promote efficient energy production in India and some $200 million were to be made available through the Import-Export Bank for clean energy projects. India, on its part, exercised leadership in this field by becoming one of the first major developing countries in embracing specific national goals for energy efficiency and renewable energy. In his recent address to the United Nations General Assembly, November 2001, the Indian Prime Minister Atal Behari Vajpayee bemoaned the fact that India’s participation in global sustainable development regimes, particularly climate change and biodiversity, has not yielded sufficient resources in combating poverty reduction.

The old school of environmental negotiators from developing countries had mostly argued for increased multilateral assistance and credible north-south transfers in technology and finances. (An idea that met its death as it were with the end of the Cold War, appearance of aid fatigue in OECD countries and debate surrounding the lack of accountability in recipient countries). Of course, these were some of the clauses painstakingly negotiated at Rio de Janeiro by Indian negotiators in 1992.

Interestingly, the global negotiations on multilateral trade that concluded with the GATT agreements in Marrakech (1994) had introduced the trend towards globalization and liberalization. It can be argued that the priority accorded to market forces and economic growth has impacted – negatively – on the pace of environmental progress as envisaged by the Rio process. The contest among the various sectors of the national society as also the competing demands on political leadership (particularly in a democracy) in this great game between globalization and sustainability introduces a complex dimension in meeting the problem of global environmental change. The new school of environmental negotiators from India needs to grasp these realities sooner rather than later. And thus leverage CDM projects by combining international environmental negotiations with international business negotiations in order to attain the twin objectives of poverty reduction and sustainable development.

---

4. Japan: Struggling to Achieve 6%

by Yasuko Kameyama

Japan attracted the world’s attention when the sixth Conference of the Parties to the Framework Convention on Climate Change (COP-6) was resumed in Bonn in July 2001. It had been an ally with other non-EU industrialized countries such as the U.S., Canada, and Australia at least until the last meeting in The Hague in November 2000. In March 2001, however, the U.S., under the new administration of President Bush Jr., announced its disagreement with concepts inscribed in the Kyoto Protocol. It stated that the Kyoto Protocol had a number of problems, such as the US’s emission reduction target being too strict, and not including meaningful participation by the developing countries.

The EU showed its disappointment towards the U.S., and announced it would aim for an early ratification and enforcement of the Kyoto Protocol even without the US’s participation. It urged Japan to follow suit.

Japan stood in between the U.S. and the EU. Some insisted that the priority for Japan was to convince the U.S. to return to the Kyoto Protocol arena. They considered the U.S. as the most important actor to take action to reduce greenhouse gas emissions, as it alone was responsible for nearly a quarter of the world emissions. Others believed Japan should move ahead with the EU and ratify the Protocol. They considered Japan should take a leading role in the ratification process, as the Protocol bears the name of the ancient capital of Japan, Kyoto, and it was a symbol of Japan’s contribution towards global environmental conservation. Japan’s final decision at the end of resumed session of COP-6 was to prioritize the latter, aiming for ratification of the Protocol, although still maintaining its request for the U.S. to return to the Kyoto regime.

Which factors influenced Japan’s decision? How will Japan be able to achieve its 6% emission reduction target under the Kyoto Protocol? This article briefly reviews Japan’s current climate change policy and explains its background.

Japan’s macro domestic and international perspective on climate change policy

Japan’s greenhouse gas emissions (GHG) have been on the rise even after 1990. The emission of carbon dioxide (CO$_2$) was 1,225 MtC (m tons carbon equivalent) in 1999, a 9.0% increase from 1990$^{14}$. Japan’s early national commitment in 1990 was first to stabilize CO$_2$ emission per capita, then, if possible, to stabilize the total emission in Japan$^{15}$, but even per-capita emission increased by 6.3% since 1990. The most rapid increase has been observed in the transportation sector (23.0%), while only a minor increase was observed in the industry sector (0.8%). In order for Japan to reach its 6% reduction target, it needs to decrease its emission by about 15% from 1999 level by 2008-2012. Such a decrease in the level of emissions will not be easily achieved. On a per-capita basis, Japan is already one of the least contributors to climate change among the industrialized or Annex I countries of the UNFCCC. Nevertheless, a series of additional policies is necessary to achieve this target.

Soon after the conclusion of the Kyoto Protocol in 1997, the Japanese government commenced a new procedure that was required to implement and ratify the Kyoto Protocol. In June 1998, it announced the Guideline of Measures to Prevent Global Warming. A specific target was set in the guideline for each sector to

$^{14}$ Ministry of the Environment, 2001
$^{15}$ Government of Japan, 1990
achieve the 6% reduction goal as a whole. A 2.5% reduction was to be achieved through steadfastly promoting measures relating to energy supply and demand. Emissions of some fluorocarbons (HFC, PFC and \( \text{SF}_6 \)) were to be limited to about 2% increase. Net removal by sinks under Article 3.3 and 3.4 of the Kyoto Protocol was expected to amount to 3.7%. The rest (1.8%) was to be covered by emission trading and the other flexible or Kyoto mechanisms\(^{16}\).

The abovementioned guideline involved two crucial assumptions. First, it was assumed that sequestration by all managed forests in the country during the first commitment period would be counted under Article 3.4 where additional sequestration of GHGs by land use and land use change was to be counted as agreed in later COP sessions. Much of the forests that covers more than 60% of Japanese territory were planted after the Second World War, and most trees in reforested areas had been mature by 1990. This posed a serious disadvantage to Japan under Article 3.3, which accepted sequestration of \( \text{CO}_2 \) for certain activities since 1990. It was necessary for Japan to be able to count sequestration by management of forests that were planted before 1990. The second assumption was that Japan would be able to fully use all three Kyoto mechanisms. Agreeing to rules necessary to utilize these mechanisms was indispensable for Japan to ratify the Kyoto Protocol. These two assumptions were reflected in Japan’s position at international negotiations since 1997.

After a new phase of negotiation under the Buenos Aires Plan of Action started in 1998, Japan concentrated on making progress in these two issues mentioned above. In addition, on compliance procedures, Japan was in favor of the facilitative type of procedure (i.e. non-binding). It believed countries would have more difficulty in ratifying the Protocol if a strict penalty was imposed on parties in non-compliance. Japan and other members of the Umbrella group were hesitant to agree to the establishment of the enforcement branch especially because a penalty could be strengthened at any time once the procedure was established. Hesitation also came partly from their perception towards EU countries. Some considered the EU may not meet the target and not follow the enforcement procedure either.

At the first session of COP-6 in The Hague in November 2000, those three themes became the most important issues to be negotiated. Japan sided with the U.S., but both countries could not come to an agreement with the EU. After the Bush government announced to leave the Kyoto Protocol in spring 2001, the EU made substantial concessions to other Umbrella group countries on the sink issue. Other matters were agreed somewhere in the middle between the EU and the Umbrella group. The developing countries criticized the compromise between the EU and the Umbrella group for being too generous - and for being less environmentally sound. This accusation became milder as the Annex I countries accepted the establishment of three types of financial mechanisms to assist developing countries.

**The Role of the Kyoto Protocol**

With the Bonn Agreements in mid-2001 and the subsequent COP-7, many of the unresolved questions since Kyoto were solved. Now, we are in the next phase, implementation of the Kyoto Protocol. On the whole, Japan has now a good possibility of achieving its 6% emission reduction target under the Kyoto Protocol. As has been indicated in the Guideline of the year 1998, Japan is likely to fully utilize sink sequestration and mechanisms. Japan may be able to achieve the commitment of the Kyoto Protocol, but, more generally, changes in accounting rules for sinks and uses of mechanisms may allow countries to reach their official targets without

\(^{16}\) Government of Japan, 1998
actual emission reductions. Thus, evaluation of Japan’s commitments would only be possible after observing what kind of policies and measures are implemented and what their effects are at the domestic level in Japan.

The Law Concerning the Promotion of the Measures to Cope with Global Warming was enacted in October 1998 and entered into force in April 1999. Under this law, the Central Council of the Environment adopted “the Basic Guideline for Mitigation of Climate Change” in March 1999 to address specific policies and measures that are not dealt with in the law. The Law Concerning the Rational Use of Energy, amended in June 1998 and entered into force in April 1999, further strengthens energy efficiency of electric appliances.

The Japanese government has already started to move towards ratification of the Kyoto Protocol since COP-7. A meeting of the Cabinet for global warming policy was held on November 12, 2001, right after the Marrakech Accords and Marrakech Declaration were agreed t COP-7. The Cabinet officially announced its intention to propose ratification of the Kyoto Protocol in the next Diet Session. It also raised three points that would be significant to Japan in the near future: (1) review of the original Guideline of Measures to Prevent Global Warming, (2) of change in the people’s lifestyles as well as institutional changes, and (3) further international negotiations to gain participation of the U.S. and the developing countries. Some ups and downs in domestic politics are still expected in the near future, but ratification in one way or another became quite clear after COP-7.

What is expected of Europe?

Throughout the history of more than a decade of climate change negotiations, each country seems to have played only one role, either as “environmental leader” or as “follower”. The European countries have usually been recognized as “leaders”. It may be worthwhile to consider, what true “leadership” entails. There seem to exist at least two negotiation styles, exemplified by the EU and Japan.

During the negotiation up to Kyoto, the EU had suggested a 15% reduction of (three) greenhouse gases, but today we see the EU struggling even to achieve the 8% reduction target for (six) greenhouse gases. Although the EU’s opening positions was not a commitment, the approach taken by the EU is to set a goal first and later to discuss and decide how to actually achieve it. The Japanese style of negotiation, on the other hand, is much more cautious. The government is careful not to state positions which cannot be achieved with a high degree of certainty. The EU’s position certainly looks more environmentally sound, although when countries are observed at the domestic level, the situation does not look unfamiliar in any of these countries: some national actors support emission reductions, other oppose them. Japan is clearly struggling to achieve the Kyoto target, and many countries in the EU are also struggling to achieve their country-specific emission targets within the EU bubble of 8%. This makes the EU’s actual case quite similar to Japan.

In order for the EU to become a real environmental leader, it would have to clearly succeed at fulfilling its obligations. If its 8% reduction goal were not met other countries would feel uneasy to follow the EU’s proposals in the next round of negotiations.

Another issue to be solved is the participation of the U.S. Although EU, Japan and other Annex I countries agreed to move ahead without the U.S., we are all aware of the fact that it is the largest country that emits nearly a quarter of the global emissions. The EU and Japan, together, need to collaborate in any ways to prove the benefit of the Kyoto regime. There are ways in which all countries could take a role in solving the global challenge of “climate change”.

17 Akao, 1993; Tanabe, 1998; Takeuchi, 1998
5. A View from the United States: COP-7 and the Kyoto Protocol

by Miranda A. Schreurs

In the US, amidst the heavy daily news coverage of the "war on terrorism", the "war on greenhouse gas emissions" was completely lost in the smoke. It is probably fair to say that most Americans had no idea that the negotiations to complete the rules for the Kyoto Protocol were taking place in Marrakech, Morocco, during the first weeks of November. The nation's attention has been glued to the World Trade Center attacks and the subsequent US bombing of Taliban positions in Afghanistan. Still, climate change remains an important issue and one that the US will have to address.

The Kyoto Protocol was described in the Washington Post as a "groundbreaking treaty" that "marked an important victory for European and environmental leaders in rallying the international community behind a document that was rejected earlier this year by President Bush\(^\text{18}\). Now that the rest of the world has determined to move forward on Kyoto even without US participation, it will be crucial for the US to produce its own climate change mitigation strategy. Whether or not it can produce one that will win the world's approval remains to be seen. The difficulty is that the US public, industry, and government remains deeply divided in its assessment of Kyoto and of how best to respond.

The White House

The White House did send a delegation to observe the negotiations, but it remained on the sidelines. The administration maintained its opposition to an agreement that it considered detrimental to the US economy. In reaction to the conference, White House spokesman Ari Fleischer stated "that President Bush took note of the rules agreed upon in Morocco. 'He agrees with the need to reduce greenhouse gas emissions. His Cabinet review is under way, to determine a way that can be done without forcing America into a deep recession."

The Bush White House was strongly criticized both domestically and internationally for unilaterally rejecting the Kyoto Protocol as "fatally flawed" in March 2001 without any effort to first consult with other states. Belatedly recognizing at least its diplomatic mistakes, the White House has since clarified that it agrees to the need for action but not in the form of the Kyoto Protocol. Instead, it emphasizes voluntary measures by industry to reduce greenhouse gas emissions, further scientific research, and long-term technology development that could result in a new generation of low-emitting technologies. On June 11, just prior to a European tour, Bush announced his intentions to establish a U.S. Climate Change Research Initiative to study areas of scientific uncertainty and develop priority areas for investment\(^\text{20}\). He also announced his support of a National Climate Change Technology Initiative to be centered in universities and the national laboratories (an assessment report is scheduled for release in January). These plans have won Bush both a good degree of support from those in the US critical of the Kyoto Protocol and strong criticism from those who feel the US is avoiding the necessity of taking immediate action in the hopes of technological breakthrough in the long run.

\(^{18}\) November 11, 2001, A2
\(^{19}\) The New York Times, November 11, 2001, A5
\(^{20}\) White House Press release, June 11, 2001
It remains unclear what the status is of White House initiatives to develop an alternative to Kyoto. There is a studied ambiguity in White House responses to requests for details. To what extent this is because of September 11 is difficult to assess.

**The National Energy Policy Development Group**

Climate change policy is closely tied to efforts to develop a new energy policy for the country. Prior to September 11, 2001, Vice President Richard Cheney was in the hot seat in relation to his role as Chair of the National Energy Policy Development Group. This energy task force released a report in May 2001 entitled, "Reliable, Affordable, and Environmentally Sound Energy for America's Future." The report outlined an energy policy that critics claimed was short on energy conservation and renewable energy goals and biased towards the fossil fuel and nuclear energy industries. It was also criticized for giving short shrift to concerns about greenhouse gas emissions. Pressured by the Democrats, at the end of the summer the General Accounting Office (GAO) demanded that Cheney release the names of the individuals who advised the National Energy Policy Development Group. The GAO was responding to concerns that the task force was favoring fossil fuel industries. The Vice-President's office refused the GAO's request arguing that it did not have this authority. On September 8, 2001 the Washington Post (p. A13) reported that U.S. Comptroller General David M. Walker, head of the GAO, was considering litigation against the White House for its failure to release records relating to the development of its energy policy. The GAO has since set this issue aside feeling it inappropriate to be suing the White House when the nation is at war. The fear of many environmentalists is that the White House will now try to use the September 11 attacks to pursue its energy development goals without taking adequate consideration of environmental concerns or energy conservation possibilities into account.

**Congress**

Like much of the nation, Congress is focused on the war efforts, the economy, and "homeland security." Climate change is not on its agenda although it is on the agenda of a few Senators, including James Jeffords (Independent-Vermont), John McCain (Republican-Arizona), and Joseph Lieberman (Democrat-Connecticut). Prior to September 11, numerous calls for a US response to the Bonn negotiations (COP 6, part II) emerged from the Senate and slowly these voices are beginning to be heard again.

In 1997 just before the third Conference of the Parties at Kyoto, Senators Robert Byrd and Chuck Hagel proposed a resolution to the Senate requiring the Clinton administration to oppose any international agreement on climate change that did not include binding commitments by developing countries. The resolution passed 95-0. This vote left many believing the US Congress is opposed to any action on climate change. This image is not entirely accurate.

As European criticism of the US position on Kyoto built up in the summer of 2001 and domestic polls showed displeasure with the administration's position, some Senators began to call for swifter action on climate change and a stronger US role in international mitigation efforts. In August, for example, the Senate Foreign Relations Committee unanimously approved a non-binding resolution calling upon the White House to...
participate in the climate change negotiations either through a proposal for a revised Kyoto Protocol or with a new binding agreement for reducing greenhouse gas emissions\textsuperscript{22}.

Calls for action are again emerging. Senator Jeffords heads up the Senate Environment and Public Works Committee. He is backing the idea of a "four-pollutant" bill that would set government limits on industrial emissions of carbon dioxide, mercury, sulfur dioxide, and nitrogen oxides. The committee has been holding hearings related to the bill. Senators McCain and Lieberman have also both called on the administration to address carbon dioxide emissions and have supported the formation of a nationwide "cap and trade" system work\textsuperscript{23}. It remains uncertain whether or not their efforts will be successful.

Environmental Groups

In the aftermath of the attack on the US, the environmental community is somewhat at a loss for how to proceed. Prior to September 11, the environmental community had the Bush administration on the defensive. They were effectively portraying Bush as an enemy of the environment because of his support of oil drilling in the Alaskan National Wildlife Refuge, efforts to rescind numerous environmental executive orders that Clinton passed in his last days in office, and rejection of the Kyoto Protocol. Public opinion polls suggested that Bush's position on environmental issues was hurting him. A Washington Post and ABC television network poll conducted in June found that 50 percent of those polled disapproved of Bush's environmental policies (compared to 41 percent that approved) and 58 percent disapproved of his handling of the energy problem\textsuperscript{24}.

September 11 changed all that. It is out of vogue to criticize Washington when the nation is at war. Bush's public opinion ratings are well over 80 percent. Environmentalists no longer have the ear of the public as they did just a few months ago. Thus, despite an Energy Department report that US carbon dioxide emissions had jumped 3.1\% since 2000 and that total CO\textsubscript{2} emissions were almost 14\% higher than in 1990 and efforts of many groups such as the National Wildlife Federation, Environment Defense, and the Natural Resources Defense Council to pressure the administration to act, there has been little action. Slowly, environmental groups are trying to find new "politically correct" ways to get out their message.

Industry

US industry remains divided in its assessment of international climate change protection efforts. The Global Climate Coalition, a large group of industries that are opposed to the Kyoto Protocol, continue to portray Kyoto as an unworkable plan that would be detrimental to the health of the U.S. economy. They join the Bush administration in emphasizing remaining uncertainties in climate change science.

On the other hand, there are a growing number of industries that have already taken steps to reduce their own emissions and that have an interest in US participation in an emissions trading system. The Pew Center on Global Climate Change organized a Business Environmental Leadership Council that brings together a growing number of industries that recognize climate change as a legitimate problem and argue that businesses in the US should take concrete steps to reduce emissions now. Members of the group include such big names as IBM,

\textsuperscript{22} Washington Post, August, 2, 2001, p. A14
\textsuperscript{23} Associated Press State and Local Wire, November 1, 2001
\textsuperscript{24} EFE News Service, June 5, 2001
Boeing, British Petroleum, Hewlett Packard, DuPont, and Intel. Marrakech is likely to further divide US industry into those groups that see the international plan as unworkable and those who feel US industry will be hurt if it is unable to benefit from the Kyoto mechanisms.

**Local Initiatives**

While the US sat on the sidelines at Marrakech, some domestic initiatives to address carbon dioxide emissions were launched suggesting that some regions are ready to act with or without the support of Washington. Mayor Daley, for example, announced that Chicago and Mexico City were joining forces in the design of the Chicago Climate Exchange (CCX), a voluntary market for trading emissions of greenhouse gases. CCX is funded through $1.1 million in grants from the Chicago-based Joyce Foundation. Chicago, home to the Chicago Board of Trade, sees a potential new industry in the development of a carbon emissions trading system.

**Looking to the Future**

In many ways the timing of COP-7 could not have been worse from the perspective of US involvement in international climate change mitigation efforts. Prior to September 11 pressure was building on the White House to take action and Congressional action appeared imminent.

Climate change will most certainly resurface as an issue once the nation's almost complete focus on the war on terrorism subsides. There is much uncertainty here about how the rest of the world will move forward on implementing Kyoto US involvement. At the same time, there is some concern about what the consequences for US industry will be if the rest of the world indeed moves forward with this agreement. Seldom in history has such an important international agreement been formed without US involvement. The world continues to wait to see how the US will respond, but unlike in the past it is not waiting for the US before it takes action. In many ways, this is a new page in history.

---

25 Ascribe Newswire, November 13, 2001
II. Book Review

By Benito Müller

LUTERBACHER, Urs and Detlef F.SPRINZ (eds) 2001,
International Relations and Global Climate Change, London and Cambridge

The subject of the negotiations leading up to and continued under the UN Framework Convention of Climate Change (UNFCCC, adopted at the Rio World Summit in 1992) is arguably the most complex ever addressed in international relations. As witnessed in The Guardian at the end of the recent Marrakech Conference (17 Nov. 2001): ‘With the isolated exception of the United States, the world has now agreed the most complex environmental treaty ever and the first which is legally binding. While environmentalists rightly have some reservations, the bigger point is that the treaty marks unprecedented global cooperation to face a common threat.’

To put together a one-volume edition of articles covering the impact of these negotiations on the field of international relations is therefore no mean feat, as Arild Underdal corroborates: ‘The volume stands out as one of the few that will be of great interest to readers looking for conceptual frameworks and general models as well as to readers looking for help to understand the politics of the climate-change challenge itself.’

As ‘a critical review of social science and international relations literature on the climate change issue’[p.5], the volume is organised into five parts, centring around a set of key questions: Which institutions are already in place? Which new institutions and forms of cooperation are being added to the existing international framework? What are the strategies that can explain some of the moves made in this context by various protagonists? Who are the major players? What are their interests? How can one think about ways to overcome major obstacles that confront international cooperation on these matters?

Urs Luterbacher and Detlef Sprinz begin the volume with a general analysis of the problems of global environmental cooperation. They focus on a cooperative problem which arises if the atmosphere is characterised as a “common (good),” i.e. ‘a collective good to which everyone has access’. The problem, generally known as the “tragedy of the commons,” is that without additional constraints –e.g. taxation, or the introduction of property rights– such commons are bound to be ‘used’ (extracted) in a sub-optimal fashion. International cooperation is thus needed ‘to create a particular institutional framework to keep free-riding from occurring [and to enforce] rules of mutual restriction, such as the reduction of greenhouse gas emissions.’[13] This general discussion is followed by a brief history of the global climate change regime by Daniel Bodansky from its beginnings in the 1980s to the Buenos Aires conference in 1998 (which is slightly unfortunate given the course of event thereafter).
The second Part on concepts and theories of ‘Regime Creation’ is led by Ian Rowlands’ exploration into the potential of the four “classical theories” of international relations (Realism & Neo-realism, Historical Materialism, Neo-liberal Institutionalism, and Cognitive Approaches) to contribute to the understanding of international cooperation in the climate change context. An interesting point for those less pessimistically inclined about the prospects of international cooperation than the members of the neo-realist school has to be the neo-realistically inexplicable fact of the Kyoto Protocol surviving the withdrawal of cooperation by the only conceivable ‘(climate) hegem on’: the United States. And the ever decreasing circles of the ‘Global Climate Coalition’—an anti-Kyoto coalition of primarily US ‘capital’—seem to make similarly short shrift of materialist theories as (sole) explanatory tool. Very reasonably, therefore, Rowlands concludes that ‘faith should not be exclusively placed in any one approach.’[64]

The general outline of the concepts and theories of regime creation is followed by two chapters analysing the roles of domestic politics and non-state actors in the creation of the multilateral climate change regime. Sprinz and Martin Weiss summarise the major theoretical approaches to the study of multiple-level governance and evaluate them empirically relative to the global climate change context. Kal Raustiala, in turn, considers the role of non-governmental organisations (NGOs), a role which has hitherto largely been neglected in the traditional international relations theories. The final two contributions to the theme of concepts and theories are rightfully dedicated to one of the core concepts in the creation of a functioning global climate change regime: that of ‘justice’ or ‘equity.’ Matthew Paterson provides a concise and lucid overview of the principles of justice applicable in the climate change context. Ellen Wiegandt then fills in the picture of ‘what fairness means to different parties and how it is being discussed within the FCCC process’[128] Her account of the very complex equity issues involved in assigning emission targets to international actors is exemplary and recommended to anyone who is interested in a structured description of intricacies involved. There is only a
small point in which I disagree with her assessment, namely that ‘countries such as India and China would be singled out for making the greatest mitigation efforts’[134] if one were to base ones judgment on projected future emissions. The fact illustrated in the figure is that – even if one disregards current (and past) discrepancies – emissions of people living in industrialised countries (such as the average American) are still projected to grow well-above the global average, while those of the average Chinese or Indian are actually at the average level or below (see figure). Far from improving on past behaviour, industrialised countries are projected over the next twenty years to widen the existing ‘emissions gap’ significantly, which is why they have the obligation to act first and more strongly, even if one disregards historic performance.

The third part of the collection focuses on the manner in which modelling can be used to analyse and further the process of regime creation. Frank Grundig, Hugh Ward and Ethan Zorick begin this discussion with a look at how the global climate change negotiations themselves can be modelled, primarily in game-theoretic terms. They conclude that ‘the heart of the problem is that the impossibility of exclusion [from partaking in climate stability (‘a relatively pure public good’)] may make it rational for a country to free-ride’[154] After quite a lengthy look at the past rounds of negotiations from the perspectives of four different modelling approaches, they conclude that ‘major difficulties must be overcome in solving the global climate change problem.’ Given the likelihood that the chapter was written before the break-through at Bonn and Marrakech, the authors can hardly be blamed for their rather pessimistic outlook. However, in light of these events, it may be necessary to revise some of the premises in their analysis. Indeed, it might be more accurate to base such an analysis on the assumption that what is at stake is not a ‘common good’ which allows for free-riding, but a ‘common bad’, where inaction is not free but incurs considerable costs. The second chapter in this part on modelling, written by Luterbacher, returns from the game-theoretic meta-level to consider the manner in which simulation models can be used in climate change policy making. In the relatively short space of merely 14 pages, Luterbacher manages to give a clear and very useful taxonomy of the many types of models which have been devised for this purpose.

The penultimate part of the collection then turns to issues concerning implementation, compliance, and effectiveness. Bodansky leads with a description of ‘International Law and the Design of a Climate change Regime,’ followed by a piece by Ronald Mitchell on ‘Institutional Aspects of Implementation, Compliance, and Effectiveness.’ In the concluding part, the editors (together with Carla Norrlöf) take a step back to consider the inter-relations of the emerging climate change regime with other global environmental accords and with the World Trade Organization.

As indicated at the outset, *International Relations and Global Climate Change* is a well-structured and coherent account of the emerging multilateral climate change regime from the vantage point of the field of International Relations. Both practitioners of that field and participants in the climate change debate will be well-served by its analyses.
III. Online Resources

1. Climate Policy

1.1 International Climate Policy

Official

OECD
http://www1.oecd.org/env/cc/index.htm

United Nations Framework Convention on Climate
http://www.unfccc.de/index.html

Institutes

Center for International Climate and Environmental Research
http://www.cicero.uio.no/index_e.asp

International Institute for Sustainable Development (IISD)
http://www.iisd.ca

Potsdam Institute for Climate Impact Research
http://www.pik-potsdam.de

World Climate Research Programme
http://www.wmo.ch/web/wcrp/wcrp-home.html

World Resources Institute
http://www.wri.org/climate/

Nongovernmental Organisations

Das Klima-Bündnis der europäischen Städte mit indigenen Völkern der Regenwälder
http://www.klimabuendnis.org/mbhome/start.htm

Internationale Klimaschutzpolitik
http://www.klimaschutz.de/kbklima/

Germanwatch
http://www.germanwatch.org/

World Business Council for Sustainable Development
http://www.wbcsd.ch/

Greenpeace
http://www.greenpeace.org/

Publications

Biermann, Frank 2000: Stand und Fortentwicklung der internationalen Klimapolitik, WZB

BMU 2001: Internationaler Klimaschutz – Glossar
http://www.bmu.de/sachthemen/energie/klima_bonn_glossar.php
Germanwatch 2001: Globaler Klimawandel: Neue und stärkere Evidenz
http://www.germanwatch.org/rio/bpipcc01.htm

International Institute for Sustainable Development 2001: Climate Change
http://iisd.ca/climatechange.htm

International Institute for Sustainable Development 2001: Seventh Conference of the Parties to the UN Framework Convention on Climate Change October 29 - November 9, 2001, Marrakech, Morocco

http://www.iisd.ca/linkages/vol12/enb12189e.html

http://www.aicgs.org/topics/g2001/schreurs.shtml

Sprinz, Detlef F. 2001: Summary Notes of the 7th Conference of the Parties of the UN Framework Convention on Climate Change, 29 October – 10 November 2001, Palais des Congrès, Marrakech, Morocco

Parry, Martin, Rosenzweig, Cynthia, Iglesias, Ana, Fischer, Günther and Livermore, Matthew 1999: Climate Change and World Food Security: A New Assessment

Sachs, Wolfgang 2001: Das Kyoto-Protokoll. Lohnt sich seine Rettung?

UNFCCC: Kyoto Protocol
http://www.unfccc.de/resource/docs/convkp/kpeng.html

UNFCCC 1995: Berlin Mandate
http://www.unfccc.de/resource/docs/cop1/07a01.pdf

UNFCCC 1996: Geneva Ministerial Declaration
http://www.unfccc.de/resource/docs/cop2/15a01.pdf

UNFCCC 1999: Buenos Aires Plan of Action:
http://www.unfccc.de/resource/docs/cop4/16a01.pdf

UNFCCC 2001: Seventh Session of the Conference of the Parties

http://www.wupperinst.org/Publikationen/TerraTec2001-Dokumentation/TerraTec-summary.pdf

1.2 European Climate Policy

Official

European Commission
http://europa.eu.int/comm/environment/climat/home_en.htm

European Environment Agency
http://themes.eea.eu.int/Environmental_issues/climate
Nongovernmental Organisations

Climate Network Europe
http://www.climnet.org/

European Environmental Bureau
http://www.eeb.org/activities/energy/main.htm

WWF Europe
http://www.panda.org/resources/programmes/epo/climate_energy/climate_energy.cfm

Publications


1.3 German Climate Policy

Official

Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit
http://www.bmu.de/fset1024.php

Wissenschaftlicher Beirats der Bundesregierung Globale Umweltveränderungen
http://www.wbgu.de/

Institutes

Deutsches Klimarechenzentrum GmbH
http://www.dkrz.de/

Karlsruhe Institut für Technikfolgenabschätzung und Systemanalyse (ITAS)
http://www.itas.fzk.de/

Max-Plank-Institut für Meteorologie
http://www.mpimet.mpg.de/

Wuppertal Institut für Klima, Umwelt, Energie
http://www.wupperinst.org/

Potsdam Institute for Climate Impact Research
http://www.pik-potsdam.de/

Nongovernmental Organisations

Bund für Umwelt und Naturschutz Deutschland
http://www.bund.net/
Germanwatch
http://www.germanwatch.org/kliko/k14home.htm

Greenpeace
http://www.greenpeace.de/GP_SYSTEM/1QNTIPF6.HTM

Klimaschutz im Internet
http://www.klimaschutz.de/kbklima/

WWF
http://www.wwf.de/

Publications


BMU: Nationales Klimaschutzprogramm Beschluss der Bundesregierung vom 18. Oktober 2000 (Fünfter Bericht der Interministeriellen Arbeitsgruppe "CO2-Reduktion")

BMU: Klimakonferenz vom 29.10. - 09.11.01 in Marrakesch. Die letzte Etappe vor dem in Kraft treten des Kyoto-Protokolls. Eine Einführung in die Konferenz, ihre Inhalte und die Verhandlungsposition der Bundesregierung
http://www.bmu.de/download/dateien/klimakonferenz_sieben.pdf

BUND: COP 7: Den Klimaschutz voranbringen - Keine weiteren Schlupflöcher durch die Hintertür!
http://www.bund.net/themen/klima/marakesch.shtml

Germanwatch: Klimagipfel in Marrakesch
http://www.germanwatch.org/rio/klimagipfel.htm

Germanwatch: Erfolg von Marrakesch: Jetzt kann das Kyoto Protokoll ratifiziert werden - ab jetzt muss es nachgebessert werden. Presseerklärung, 10.11.01
http://www.germanwatch.org/pubpress/p011110a.htm

Helm, Carsten ; Sprinz, Detlef F. 2000: Measuring the Effectiveness of International Environmental Regimes (PIK-Report No. 52)
http://www.uni-potsdam.de/u/sprinz/doc/pik-report52.pdf

Holtrup, Petra 2001: Das Scheitern der Klimaschutzdiplomatie. Öl ins Feuer der transatlantischen Beziehungs krise?
http://www.weltpolitik.net/policy-forum/article/423.html

Holtrup, Petra 2001: Die ersten 100 Tage der Bush Regierung - ein Desaster für die internationale Klimapolitik?
http://www.weltpolitik.net/policy-forum/article/305.html

Karlsruhe Institut für Technikfolgenabschätzung und Systemanalyse (ITAS): Das Kyoto-Protokoll zum Klimaschutz.
http://www.itas.fzk.de/deu/TADN/TADN198/9801NEUES04.htm


Max-Plank-Institut für Meteorologie, Abteilung Physik des Meeres und Klimadynamik 1999: Quellen und Senken des atmosphärischen Kohlendioxids
Max-Planck-Institut für Meteorologie, Abteilung Physik des Meeres und Klimadynamik 1996: Klimavariabilität und Nachweis einer anthropogenen Klimaänderung

Ott, Hermann, E. 2001: Climate change: an important foreign policy issue

Rapf, Oliver, Treber, Manfred 2001: Analyse des deutschen Klimaschutzprogramms
Viele kleine Schritte sind noch kein großer Sprung
http://www.gmh.uni-mannheim.de/forum/pdf/IMA_Analyse.pdf

Der Rat von Sachverständigen für Umweltfragen 2000: Umweltgutachten 2000
http://www.umweltrat.de/gutach00.htm

Sardemann, Gerhard, Karlsruhe Instituts für Technikfolgenabschätzung und Systemanalyse (ITAS) 1999: Das Kyoto-Protokoll vor dem Hintergrund aktueller Abschätzungen zum Stand und der Entwicklung weltweiter Treibhausgasemissionen


Siehe unter:


Wuppertal Institut für Klima, Umwelt, Energie: Site zur COP 7 - Klimakonferenz in Marrakesch: Wie geht es weiter nach den "Bonner Beschlüssen"?
http://www.wupperinst.org/COP7/english.html

2. German Foreign Policy

http://www.hsfk.de/deu/pub/rep/rep0501.pdf

http://www.aicgs.org/publications/PDF/Lily.pdf

http://www.zei.de/download/zei_dp/dp_c90_sendelbach.pdf

Jacobs, Andreas 2001: Deutschland und der Nahe Osten: Standortbestimmungen und Handlungsempfehlung (Konrad Adenauer Stiftung (Hrsg): Zukunftsforum Politik Nr.27)
http://www.kas.de/publikationen/2001/aussen/za_nr27.pdf

http://www.zei.de/download/zei_dp/dp_c91_monar.pdf

http://www.aicgs.org/topics/911/puhl.shtml

Redefining German Security: Prospects for Bundeswehr Reform, German Issues 25/2001, AICGS


Weisser, Ulrich 2001: Strategic Aspects of the Global Campaign Against Terrorism and some Political Military Implications: A German View, AICGS

Winter, Helen 2001: Die deutsche und europäische Position bzgl. einer neuen WTO-Verhandlungsrunde
http://www.weltpolitik.net/policy-forum/article/227.html

IV. Offline Resources

1. Climate Policy


Böckem, Alexandra 2000: Klimapolitik in Deutschland: Eine Problemanalyse aus Expertensicht. Hamburg, HWWA.

Carius, Alexander 2001: Umweltpolitik in Mittel- und Osteuropa. Analyse der EU- Osterweiterung, Norderstedt


Harris, Paul G. (ed) 2000: Climate Change and American Foreign Policy, New York


Hay, Samuel P. 2000: A History of Environmental Politics Since 1945, Pittsburgh


Luterbacher, Urs; Sprinz, Detlef (Hrsg.) 2001: International Relations and Global Climate Change, Cambridge


Rao, Vinayak, Berlin Climate Summit: No Climate for Change, Down to Earth (CSE: New Delhi) April 30, 1995

Rao, Vinayak, Ozone Politics: A Depletion of Faith, Down to Earth (CSE: New Delhi), October 15, 1995

Rao, Vinayak, Science and Climate Change (letter to editor) in Nature (London), 19 October 1995


Sampson, Gary 1999. WTO Rules and Climate Change: The Need for Policy Coherence, in: Chambers B. (Hrsg.) Global Climate Governance: Inter-Linkages between the Kyoto Protocol and other Multilateral Regimes, Tokyo


Scholl, Bruno 2000: Deutsche Klimapolitik im Spannungsfeld internationaler Herausforderungen, europäischer Koordinierung und nationaler Umsetzung, Bonn


Schroeder, Heike 2001: Negotiating the Kyoto Protocol : An analysis of negotiation dynamics in international negotiations, (Münchner Beiträge zur Geschichte und Gegenwart der internationalen Politik ; 9), Münster (u.a.)


Sprinz, Detlef F., Vahtoranta, Tapani (forthcoming): National Self-Interest:
A Major Factor in International Environmental Policy Formulation, in:


Wepler, Claus 1999: Europäische Umweltpolitik. Marburg

Wiemeyer, Carsten 2000: Die ökologische Krise und die Umweltpolitik der Bundesrepublik Deutschland. Eine Anregung zu einem "Bündnis für Umweltschutz und zukunftsfähige Entwicklung", o.Ortsangabe


2. German Foreign Policy


Mildenberger, Markus; Malinowski, Krystof 2001: Die deutsch-polnischen Beziehungen seit 1990, Warschau

Rill, Bernd (Hrsg.) 2000: Deutschland und Frankreich. Gemeinsame Zukunftsperspektiven, München

Troche, Alexander 2001: "Berlin wird am Mekong verteidigt". Die Ostasienpolitik der Bundesrepublik in China, Taiwan und Süd-Vietnam 1954-1966 (Forschungen und Quellen zur Zeitgeschichte Bd. 37). Droste
About the Authors

Wolfgang Brauner, D.E.A.: Research Fellow and Project Manager at the Chair for International Relations, Trier University

w.brauner@gmx.net

Michael Grubb, Professor of Climate Change and Energy Policy, Environmental Policy & Management Group, Imperial College Centre for Environmental Technology (ICCET) RSM Building, Prince Consort Road London, SW7 2BP,

Michael.grubb@ic.ac.uk

Yasuko Kameyama, National Institute for Environmental Studies, Japan

ykame@nies.go.jp

Benito Müller, Senior Research Fellow at the Oxford Institute for Energy Studies (OIES)

benito.mueller@philosophy.oxford.ac.uk

Vinayak Rao, United Nations University, Leadership Academy, Amman, JORDAN

vinayakrao@hotmail.com

Miranda A. Schreurs, Assistant Professor, University of Maryland

mschreurs@gvpt.umd.edu

Detlef Sprinz, Ph.D., Potsdam Institute for Climate Impact Research & University of Potsdam

dsprinz@pik-potsdam.de