



The climate regime from The Hague to Marrakech: Saving or Sinking the Kyoto Protocol?

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Abstract

This paper describes and analyses the development of the climate regime from the COP meetings at The Hague to Marrakech. It discusses the issues, Parties positions and the general outcome. Analysis of the events is performed by distilling the positive and negative aspects of the accords and using theories of international relations. The paper concludes with some thoughts on where the climate regime will likely head towards in the coming years.

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1. Introduction

In 1988 NASA scientist James Hansen testified before a US Senate Committee that he was “99% certain” that global warming was underway. With the Midwest US being hit by severe heat waves, making 1988 the hottest summer on record (at this time), Hansen’s statement quickly elevated climate change to unprecedented levels of attention from the public, media, and policymakers (Pielke, 2000). Though scientific research on climate change dated much further back than 1988, it was this same year that the World Meteorological Organisation (WMO) and the United Nations Environment Programme (UNEP) jointly established the Intergovernmental Panel on Climate Change (IPCC) to provide scientific advice to policy-makers on the problem of global climate change. The publication of the IPCC’s First Assessment Report led the UN Assembly to initiate negotiations on a Framework Convention on Climate Change (FCCC), which came into being in 1992, at the time of the Rio ‘Earth Summit’. At the First Conference of the Parties (COP-1) in 1995, Parties recognised the inadequacy of the Convention’s voluntary targets,¹ and initiated the process of negotiating legally binding targets of emission reduction or limitation for the so-called Annex I countries (i.e, developed countries and those with economies in transition). This process culminated at COP-3, giving birth to the Kyoto Protocol to the FCCC, a historic landmark in international environmental law.

The Kyoto Protocol commits countries listed in Annex B² to reduce their overall greenhouse gas (GHG) emissions by at least five per cent below 1990 levels during the 5-year commitment period 2008-2012. These commitments are differentiated, thus the European Union (EU) reduces by 8%, the US 7%, Japan 6%, Ukraine and Russia stabilise, whereas Australia and Iceland are allowed to increase their emissions. In order to achieve this, Parties can use a range of sophisticated market-based instruments, the so-called ‘Kyoto mechanisms’, and land use, land use change and forestry (LULUCF or simply ‘sink’) activities. The Kyoto mechanisms include International Emissions Trading (IET; Article 17), Joint Implementation (JI; Article 6), which allow emission savings or sink enhancement projects between Annex B Parties, and the Clean Development Mechanism (CDM; Article 12), which encourages joint emissions reduction projects between developed and developing countries. Under Protocol’s Article 3.3 sink activities are limited to afforestation, reforestation, and deforestation, though the Article 3.4 leaves a door open for the inclusion of other activities. To enter into force the Protocol must be ratified by 55 Parties including 55% of 1990 Annex I emissions. Accounting for roughly 36 percent of Annex I emissions in 1990 (around a quarter of world’s emissions), the US has a *de facto* veto over entry into force of the Protocol. Without the US, only a EU+Russia+Japan+small party coalition could place the Protocol into legal effect.

It soon became clear that there was much unfinished business from Kyoto, leading COP-4 to adopt the Buenos Aires Plan of Action (BAPA), which laid out an ambitious schedule for the completion of these, as well as Convention, matters. The deadline for completion of this work was COP-6, which took place in The Hague, and which failed in reaching an agreement. Having suspended the meeting and resumed eight months later in Bonn in July 2001, Parties managed to reach a political deal, even without the US on board. This political deal then had to be translated into finer legal text, which took place at COP-7 in Marrakech. There, after another marathon midnight session, the Kyoto rulebook was finally finished and enshrined in almost 250 pages of the so-called Marrakech Accords.

This paper describes and analyses the development of the climate regime from The Hague to Marrakech. It discusses the issues, Parties positions and the general outcome. Analysis of the events is performed by distilling the positive and negative aspects of the accords and using theories of international relations. The paper concludes with some thoughts on where the climate regime will likely head towards in the coming years.

¹ Of stabilising developed countries and economies in transition (EIT) greenhouse gas emissions at 1990 levels by the year 2000.

² Annex B lists initial national commitments under the Kyoto Protocol.

2. Distrust in The Hague

The Sixth Conference of the Parties (COP-6) that took place in The Hague, in November 2000 was intended to finalize the Kyoto rulebook. Delegates had a full agenda to deal with, including unresolved issues regarding: funding, capacity building and technology transfer; the Kyoto mechanisms; sinks; and the compliance system. Even though the media portrayed the collapse of the talks to a transatlantic dispute over the issue of carbon sinks, the fact of the matter was much more complex, although sinks remained one of the most controversial issue. Even if a deal had been reached in the early hours of Saturday, many other issues remained unresolved. There are many interpretations of what happened in The Hague (cf. Dessai, 2001a; Egenhofer and Cornillie, 2001; Grubb, 2001; Grubb and Yamin, 2001; Jacob, 2001; Jacoby and Reiner, 2001; Ott, 2001a; Paterson, 2001; Reiner, 2001; Töpfer, 2001; Vrolijk, 2001). Some of the more contentious issues are described next.³

Funding, capacity building and technology transfer, usually treated under the theme of ‘developing country issues’ is of prime concern to the Group of 77 and China (G77/China).⁴ At COP-6 the North-South divide prevailed. Annex I countries neglected G77/China concerns for most of the conference. It was only until a day before the expected end of the conference that the Umbrella Group⁵ revealed a proposal that offered the creation of a new ‘window’ within the Global Environment Facility (GEF; the financial mechanisms of the Convention), with additional funding that would reach a level of 1 billion USD in the first commitment period. The EU presented a counter proposal shortly after, neither of which were to the G77/China’s liking.

Within the mechanisms group one of the major stumbling blocks was the issue of supplementarity. The EU came to The Hague arguing for strong domestic action, which for them meant a 50 per cent cap on the Kyoto mechanisms. The Umbrella Group, on the other hand, argued for no quantitative cap for the sake of economic efficiency. Together with sinks this proved to be the breaking point between the EU-US talks.

The issue of sinks proved to be one of the most contested at COP-6. The EU wanted limited sinks activities and no sinks in the CDM. The US argued that its acceptance of a –7 per cent target at COP-3 was conditional to full use of the Protocol’s sinks provisions. Consequently, the US came to The Hague claiming that by managing existing forests properly it saves 300 million tonnes of carbon (MtC) a year. Neither the Umbrella Group nor the G77/China were internally consistent with respect to this issue. Only Canada and Japan appeared to follow the US on sinks, whereas within G77/China the Group of Latin American Countries were lobbying to get sinks into the CDM. Most of the media blamed the failure of The Hague on the EU-US dispute on sinks, but in fact it was the whole package that crumbled.

The design of a compliance system, also divided parties. The EU wanted a strong compliance system (independent and impartial with, for example, a mandatory Compliance Fund in case of non-compliance), whereas the Umbrella Group opted for a softer version. The composition of the evaluation board was also a contentious problem. Developing countries argued for equal regional representation, which Annex I countries were not willing to accept.

It is also important to mention how the process led by COP-6 president and Dutch environment minister, Jan Pronk, took place. President Pronk’s negotiation style did not prove most conducive to achieve an agreement, according to some observers. After all the negotiation groups were deadlocked, the ‘Pronk paper’, a compromise deal, which was not a ‘take it or leave it’ paper, came out one day before the end of the conference. As Parties analysed the paper, they further entrenched themselves in their own position (Vrolijk, 2001), which in conjunction with little time to negotiate amongst each other led to the collapse of the talks. Many other factors, such as the sheer breadth of the agenda or the

³ This section is based on Dessai (2001).

⁴ UN developing countries lobbying group that was founded in 1964 and later expanded to represent 133 nations. China is not a member but an associate of the Group of 77.

⁵ The Umbrella Group is an informal coalition that emerged after Kyoto and which includes the US, Japan, Canada, Australia, New Zealand, Norway, Russia and Ukraine.

political uncertainty about the next US president, could be added as reasons behind the breakdown, but a word that summarises many of the factors is ‘distrust’. There was a lack of trust and understanding amongst Parties in The Hague. After expressing much disappointment, Parties decided to suspend COP-6 and resume in the summer of 2001.

3. Bushwhacking the Kyoto Protocol

The breakdown of negotiations in The Hague was followed by incredible media coverage. The media fully explored the blame game between the US and the EU, and within the EU itself.⁶ Climate change was now added to the list of transatlantic disputes such as banana wars, genetically modified foods and nuclear missile defence systems.

The EU and the Umbrella Group still tried to revive the talks at a meeting in Ottawa, Canada, shortly after The Hague, but with no success.⁷ President Clinton wanted to reach an agreement before he left office, as a legacy of his administration, but according to a senior American delegate there was lack of common understanding on some key issues.⁸ In the meantime, the Bush-Gore election battle was being taken up in the courts. While climate change did not become a major election issue, environmental issues featured prominently. Al Gore, a perceived environmentalist, was known to be a strong supporter of the Kyoto Protocol. In fact, he even went to Kyoto in 1997 to instruct his delegation to show increased flexibility if a package deal was in hands. George W. Bush on the other hand, a former Texas oilman,⁹ was known to dislike the Protocol,¹⁰ but nevertheless pledged to regulate and reduce carbon dioxide emissions from power plants during his presidential campaign. Eventually, Bush won in court and became the 43rd President of the US. After being enquired by Senator Hagel on the administration’s position on climate change, President Bush sent a letter to Senators Hagel, Helms, Craig and Roberts, in 13 March 2001, reversing his presidential campaign position. He argued that mandatory controls on carbon dioxide emissions would lead to higher electricity prices as more utilities shifted to natural gas from cheaper coal. Nevertheless, he stated, he takes climate change “very seriously”. He went on to say:

As you know, 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. The Senate’s vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns.

This policy reversal received a massive wave of criticism that was quickly picked up by the international media. Environmental groups blasted the White House, while Europeans and Japanese

⁶ There were bitter recriminations between the UK Deputy Prime Minister John Prescott and French Environment Minister Dominique Voynet (France had the EU presidency at the time).

⁷ Reuters, Friday, 8 December 2000, “U.S. says progress on climate talks depends on EU”.

⁸ David Sandalow, US Assistant secretary of state for oceans, environment and science, as quoted by the Washington Post, Friday, 8 December 2000, “Global warming accord remains elusive”.

⁹ More worrisome is the fact that everyone surrounding the President is rather ‘grey’: Vice President Richard Cheney is also a former oilman, Attorney General John Ashcroft led the charge against the Kyoto Protocol in the Senate, and current Secretary of Energy Spencer Abraham fought to protect Detroit auto makers from stricter fuel-efficiency standards as former Michigan Senator (Bomberg, 2001; Carpenter, 2001), just to mention a few.

¹⁰ While campaigning, Bush described Kyoto as ‘a bad deal for America and Americans’ (Jacoby and Reiner, 2001).

alike expressed deep concern and regret.¹¹ President Bush responded saying “We’re in an energy crisis now ... I was responding to reality, and reality is the nation has got a real problem when it comes to energy”.¹² According to many experts, this was an overstatement used to cover up the big benefactors of this policy reversal, i.e., the US oil and coal industry, which has a powerful lobby with the administration and conservative Republican congressmen.¹³ Calls for US leadership in this area followed from U.N. Secretary-General Kofi Annan, UNEP Executive Director Klaus Töpfer, and many other world leaders. On the 23rd of March, the European Union sent a letter to the White House emphasising that a global strategy to tackle climate change is an integral part of relations with the United States. European Commission President Romano Prodi and Swedish Prime Minister Goran Persson, whose country held the EU presidency at the time, signed the joint letter that challenged the United States to find the “political courage” to agree on the fine print of the deal struck in Kyoto, at talks due to take place in Bonn in July.¹⁴ A series of transatlantic letters and diplomatic endeavours followed to try and keep Kyoto alive. Even Canada, a key US ally, expressed disappointment with President Bush’s decision.¹⁵ Climate change ‘officially’ became a disputed area of transatlantic global foreign policy. Under such international pressure, the White House had to keep explaining their arguments: “The president has been unequivocal. He does not support the Kyoto treaty. It is not in the United States’ economic best interest.”¹⁶ In reply, EU environment ministers pledged to pursue ratification of the Protocol with or without the US. They argued Kyoto was “the only game in town.” Almost all world leaders (e.g. China, Japan, South Africa, Pacific Islands, etc.) expressed their disappointment at Bush’s decision.¹⁷ Both European and Japanese delegations went to Washington in an effort to reverse Bush’s decision to pull out of the Kyoto Protocol, but both pleas were turned down. In fact, the EU was even willing to renegotiate parts of the Protocol to accommodate the US¹⁸, but the administration was simply not listening. After receiving a ‘slap in the face’ in Washington, the EU started gathering support for the Kyoto Protocol around the world. A European delegation, headed by the Swedish environment minister, Kjell Larsson, visited Moscow, Tehran (the Islamic Republic of Iran was the presiding country of G77 at the time), Beijing and Tokyo. The objective of this diplomatic tour was to gather support from a wider coalition of countries in the face of the US pull out. Japan and Russia were key countries because of their share of greenhouse gas emissions. The Japanese supported the Protocol adopted in their ancient capital city, but stressed the importance of US participation for the environmental integrity of the deal.¹⁹ Australia was the first country to follow the US line. Polls in both these countries, however, revealed that the majority of Americans and Australians wanted their countries to join the Kyoto Protocol.²⁰ It was also becoming increasingly clear that the Kyoto Protocol was causing friction in the business community.²¹

On April 9th, COP President Pronk released a new proposal based on comments received from Parties²² on the ‘Pronk paper’ and extensive bilateral consultations. The purpose of the paper was to

¹¹ In the background, US lawmakers were actually preparing a bipartisan bill that would regulate carbon dioxide from power plants.

¹² Washington Post, 15 March 2001, “Hill pressure fuelled Bush’s emissions shift”.

¹³ New York Times, 15 March 2001, “Bush defends emissions stance”.

¹⁴ Reuters, 23 March 2001, “EU Tells Bush Climate Is Key to Europe/U.S. Ties”.

¹⁵ Reuters, 19 March 2001, “Canada disappointed by Bush move on pollution”.

¹⁶ White House spokesman Ari Fleischer, as quoted by CNN, 29 March 2001, “Dismay as US drops climate pact”.

¹⁷ Even prominent figures ranging from ex-Russian President Mikhail Gorbachev to actor Harrison Ford had written to U.S. President Bush urging him to develop a plan to cut greenhouse gas production (Time magazine, 2 April, 2001).

¹⁸ BBC News, 7 April 2001, “EU ready to renegotiate Kyoto”.

¹⁹ New York Times, 9 April 2001, “EU: support rising for climate deal without U.S.”.

²⁰ ABC News, 17 April 2001, “Six in 10 say U.S. should join Kyoto treaty”; Reuters, 20 April 2001, “Most Australians back Kyoto Protocol – poll”.

²¹ Financial Times, 18 April 2001, “Raising the temperature: President Bush’s rejection of the Kyoto Protocol has created a deep divide among businesses about the urgency of addressing global warming”. Paterson (2001) explains this shift in terms of the discourse of ecological modernisation in a technocratic/corporate-led version.

²² See FCCC/CP/2001/MISC.1

hold "informal ministerial consultations" in New York on 20-21 April.²³ The objective of these informal consultations was to advance political preparations before COP-6.5 in July 2001. During these consultations, all countries but the US supported the Kyoto Protocol. With respect to the paper itself, Parties noted that it still had problems that needed to be resolved.

While this entire diplomatic endeavour was taking place, the new US administration was performing their cabinet review of US climate policy so that it could be presented to other Parties in Bonn. At home, more Senators were criticising Bush for scrapping the Kyoto Protocol. These included Senator Robert Byrd one of the most vocal critics of the Kyoto Protocol and author of the Byrd-Hagel resolution,²⁴ and Senator John McCain, Bush's archrival during the Republican leadership campaign. In mid-May President Bush released details of the new US energy plan, which would undoubtedly increase greenhouse gas emissions. Both environmental groups and European ministers condemned the new plan for promoting use of fossil fuels oil and coal and for doing too little to promote conservation. Jan Pronk called it a "disastrous development" for international efforts to slow output of greenhouse gases.²⁵ Around this time, the Bush Administration had realised they would not have their proposal ready for Bonn. As part of their cabinet review, they asked the National Academy of Sciences (NAS) to identify areas of greatest certainty and uncertainty in climate change science and whether there were any substantive differences between the IPCC reports and the IPCC summaries. The timely report concluded "temperatures are, in fact, rising", and that "the changes observed over the last several decades are likely mostly due to human activities" (NAS, 2001). More importantly, the report backed up the IPCC process, which was put in question by the US government.

On June 11, 2001, President Bush disclosed his administration's view on the development of "an effective and science-based approach to addressing the important issues of global climate change". Bush continued to insist that "the Kyoto Protocol was fatally flawed in fundamental ways", but wanted the US to collaborate within the UN framework. He argued that the Protocol did not include developing countries, failed to address two major pollutants²⁶ and was unrealistic.²⁷ Nonetheless, he recognises the US's responsibility and is committed to a leadership role on this issue. The Cabinet-level working group proposal included: a) investment in advancing the science of climate change, b) setting up the National Climate Change Technology Initiative, for advancing technology to monitor and reduce GHGs, c) and partnerships within the Western Hemisphere and with other like-minded countries. The administration conveniently publicised these initiatives just before Bush left to meet European leaders in Gothenburg, Sweden.

In the EU-US summit in Sweden, the two Atlantic powers "agreed to disagree" on the Kyoto Protocol, but were determined to work together in all relevant fora to address climate change. The EU stood firm in its objective to ratify the Protocol, contrasting with a US insisting on its rejection. The EU sent its strongest signal ever that it would go ahead without the US (Athanasidou, 2001). The EU also decided to send out another diplomatic mission to gather support from Australia and Japan. While the Australians were unconvinced, Japan was going to try to convince the US to come on board until the bitter end. Much faith was put in the Bush and Japanese Prime Minister Koizumi summit in Camp David, but no advancement was reached. It was now European leaders urging Koizumi to continue the Kyoto process, even without the US. At the same time, President Pronk was having informal high-level consultations to provide an opportunity for Parties to present their views on the new 'Pronk paper'.²⁸ While Parties didn't reach any sort of agreement, there was a general sense that Parties were eager to reach an agreement of some sort (ENB, 2001). Some business groups,²⁹ especially

²³ Parallel but separate to the High-Level segment of the ninth meeting of the Commission on Sustainable Development

²⁴ A unanimously passed resolution that says that any climate agreement must not harm the US economy and must include provisions that bind developing countries to domestic emissions reductions or limitations within the same compliance period.

²⁵ CNN, 18 May 2001, "Anger over Bush energy plan".

²⁶ Black soot and tropospheric ozone.

²⁷ "Many countries cannot meet their Kyoto targets".

²⁸ FCCC/CP/2001/2/Rev.1

²⁹ For example, Enron Corp., DuPont Co., American Electric Power Co., Alcoa, BP, Ford Motor Co., etc.

multinationals, were urging the Bush administration to get back into the Kyoto process.³⁰ They feared that if other countries ratify the Protocol, US business would be out of the trading game.

Just days before COP-6.5, the Bush administration revealed they would not offer an alternative approach when talks resumed in Bonn. The Cabinet-level climate change working group had very little to show for.³¹ This was good news for the other Parties as they could continue their work without US interference. Undersecretary of State Paula Dobriansky, said the administration would not block the Europeans from attempting to negotiate with the Japanese and others on an agreement that includes mandatory targets. But she said the United States would oppose any action that would adversely affect the country or commit it financially to international climate change activities.³² Japanese efforts to persuade the US back into the game were shattered on the Friday before the start of the Bonn conference. The Japanese were getting increasingly pessimistic about going ahead without the US. While Australia hid behind the US, the EU warned the US not to obstruct the talks in Bonn. Last minute diplomatic efforts continued throughout the major capitals,³³ building a highly explosive atmosphere for the climate talks in Bonn.

4. The Bonn Agreement

Under a mood of high uncertainty and low expectations, the Bonn climate talks (COP-6.5) started on the 16 July 2001. It was relatively clear to everyone involved that if a deal was not reached Kyoto would certainly die. With the US withdrawal from the process it was understandable that any deal reached would have to accommodate the interests of other Umbrella Group members, in particular Japan, Russia, Canada and Australia, who became known as the ‘Gang of Four’. There was also a feeling that no matter what happened in Bonn, the ‘real’ decisions would actually be taken in the G8 summit in Genoa, Italy, simultaneously on-going.

Unlike other COPs, ministers were asked to attend the first week of negotiations (instead of the normal second week), so that they could not run out of time, and work throughout the weekend. On Thursday, President Pronk came out with his final compromise deal. Even though the deal did not please all Parties, most were willing to accept it, except the Gang of Four, in particular Japan who was concerned with the compliance provisions of the deal. After many informal consultations and 48 hours of non-stop negotiations, a deal was reached in the early hours of Monday. Euphoria was in the air, and the Bonn Agreement³⁴ was hailed another milestone in the Kyoto process. According to the EU the Kyoto Protocol was saved. For G77/China it represented the “triumph of multilateralism over unilateralism”.³⁵ The Bonn Agreement, which can be grouped into four main issues, is briefly described next (see also: Athanasiou and Baer, 2001; Bendick, 2001; den Elzen and de Moor, 2001; Depledge, 2001; Müller, 2001; Ott, 2001b; Torvanger, 2001).

Under the theme of developing country issues the Bonn Agreement has many new developments. It created three new funds, two under the Convention and one under the Protocol. This clear distinction between the Convention and the Protocol was one of the few US demands throughout the conference.

³⁰ Bloomberg, 7 June 2001, “Enron, DuPont urge Bush to salvage environmental pact”.

³¹ Except for some specific initiatives, which included: a) an investment of over 120 million USD for NASA research on carbon cycle, computer modelling, etc.; b) carbon sequestration projects with NGOs and companies; c) cooperation with El Salvador, Mexico and Canada.

³² Washington Post, 14 July 2001, “U.S. won’t have new plan for global warming talks”.

³³ John Prescott went to see Japanese Prime Minister Junichiro Koizumi; Japanese Environment Minister Yoriko Kawaguchi went to see Paula Dobriansky, etc. It is important to acknowledge the role of President Pronk’s Support Team, who went around the world holding informal talks with heads of delegations and ministers in order to build a well-balanced package (Schoenmaeckers, 2001).

³⁴ Decision 5/CP.6 contained in FCCC/CP/2001/L.7

³⁵ Ambassador Bagher Assadi, Chairman of the Group of 77, at the closing session of the high-level segment of the resumed COP-6 to the UNFCCC, Bonn, 22 July 2001.

The Convention Special Climate Change fund is intended to finance climate change related activities in the areas of adaptation, technology transfer, and economic diversification of vulnerable countries. The Least Developed Countries (LDCs) Fund, also under the Convention, will support the preparation of National Adaptation Programmes of Action (NAPAs). Canada pledged to contribute C\$10 million to enable the prompt start of this fund. Under the Protocol, the Adaptation Fund was created to finance concrete adaptation projects in developing countries that are Parties to the Protocol. The fund will be financed by 2 percent of the share of proceeds on CDM projects (projects in LDCs are exempt from this levy.). As Ott (2001b) has pointed out, this decision represents a major breakthrough in environmental law because it establishes a levy on international business transaction, for the financing of adaptation projects. All these three funds will be managed by the GEF, to much discontent of the G77/China. The EU, Canada, Iceland, New Zealand, Norway and Switzerland pledged to contribute €450 million annually by 2005 (with this level to be reviewed in 2008) for the three funds, GEF climate change activities, bilateral and multilateral funding and the CDM. The Bonn Agreement also saw the creation of an Expert Group on Technology Transfer and a recommendation to the COP/MOP with respect to Article 3.14 of the Protocol. This recommendation requests Annex I Parties to provide annual information on how they are striving to minimise adverse social, environmental and economic impacts on developing countries, from the policies and measures they are taking to fulfil their Kyoto commitments.

The other ‘crunch issue’ the Bonn Agreement tackles are the Kyoto mechanisms. Surprisingly, the text’s language referring that emissions should be reduced “in a manner conducive to narrowing per capita differences between developed and developing countries” paves the way for a contraction and convergence framework (Meyer, 2001). On the issue of ‘supplementarity’, the EU and others lost their battle to have a quantitative cap on the use of the mechanisms. There is also a link between eligibility to participate in the mechanisms and the compliance system. Both project based mechanisms (JI and the CDM) are to refrain from using nuclear projects, a much welcomed provision by environmental groups. Within the CDM, small-scale projects will be given priority, for example renewables up to 15 megawatts. Afforestation and reforestation projects were allowed in the CDM, only during the first commitment period, up to a ceiling of one per cent of a Party’s 1990 emissions times five.³⁶ In an attempt to avoid overselling of credits by Parties, a commitment period reserve (CPR) was introduced, so that Parties should not drop below 90 per cent of their assigned amount (i.e., emissions allocation).

With respect to sinks, forest management, cropland management, grazing land management and revegetation are now all eligible LULUCF activities. There is a forest management cap for each Annex I Party, which is listed in Appendix Z.³⁷ For example, Canada gets 12 MtC per year, Japan 13 and Russia 17.³⁸ There is no cap for agricultural management, which could represent a significant loophole. Many methodological issues, such as non-permanence, additionality, leakage, uncertainties and socio-economic and environmental impacts, etc., will need to be taken up by the Subsidiary Body for Scientific and Technological Advice (SBSTA) and IPCC.

The most contentious issue under negotiations in Bonn were matters relating to compliance under the Kyoto Protocol. With the withdrawal of the US, a supporter of a strong compliance system, the EU had to cave in to the ‘extremists’ in the Umbrella Group like Japan, who claimed this was a bottom-line issue for them. The end result was the postponement of the adoption of a legally binding compliance system until the Kyoto Protocol enters into force, at the first meeting of the Parties (COP/MOP). Nevertheless, other components of the compliance system were agreed. There will be a compliance committee with two branches. The facilitative branch will act as an early-warning system and will facilitate compliance for Parties. The enforcement branch will apply the consequences of non-compliance, which include: restoration of 130% of the assigned amount in the next commitment period, preparation of a compliance action plan, suspension of emissions trading. The compliance committee membership, a much-contested issue, ended up including 10 members: five from each

³⁶ I.e., 183 Mt CO₂ (Jotzo and Michaelowa, 2001).

³⁷ Appendix Z is included in Decision 5/CP.6 setting thresholds to how much each Party can account for carbon sequestration from forest management. Supposedly, a ‘formula’ was used to derive these numbers.

³⁸ Summing up to 302 Mt CO₂ per year for the whole of Annex B (Jotzo and Michaelowa, 2001).

regional group, one from a small island state, two from Annex I and two from non-Annex I Parties. This was a considerable victory for G77/China.

The Bonn Agreement was a political deal. In order to take effect it had to be converted into decisions that the COP would then adopt. This was the task of delegates that remained in Bonn during the second week. A day after the agreement was reached, Russia held the negotiations hostage for a whole day because it wanted twice as many sinks credits as it was given in the 'generous' Bonn Agreement. While decisions pertaining to developing country issues were agreed and waiting adoption, it soon became clear that different interpretations of the Bonn Agreement were emerging in all other negotiating groups, particularly convoluted in compliance. There was also little work done on the technical matters of monitoring, reporting and verification (Articles 5,7 and 8), which were crucial for the architecture of the Kyoto regime. Therefore, the cumbersome task of 'legalising' the Bonn Agreement was postponed to Marrakech, in October/November 2001.

5. September 11 and the US

The events of September 11 changed the world between the Bonn and Marrakech conferences.³⁹ There is no doubt, that its repercussions will be felt in international, and even national, affairs, including global climate change negotiations. Soon after the drastic events, the US led a broad coalition of countries in the fight against terrorism, which is still on going as this paper is being written. An immediate consequence of September 11 for the climate regime was that the US was unable to prepare their proposal in time for the Marrakech conference. What most commentators are wondering, however, is whether the US multilateral approaches signalled by the fight against terrorism will be transferred into other arenas such as environmental policy or climate change. Opinions are divided: 'optimists' have argued that the events will lead to enhanced cooperation and a stronger commitment to multilateralism, while 'realists' believe environmental issues will drop off the agenda (in favour of military security issues) and US unilateralism will be maintained in the areas of environment and development.⁴⁰ It is difficult to foretell how the US stance on climate change will evolve after the September 11 events, but up to now, there is no sign of any changes. Old habits die hard, especially when it comes to US foreign policy, which has followed a strong tradition of unilateralism.⁴¹

One particular commentator⁴² simplified the events as a repercussion of US dominance in the Middle East region in the quest for oil. This can probably explain a significant portion of the events, but surely not its entirety, which is complicated by political, cultural, religious and circumstantial factors and perceptions. The US is heavily dependent on the Persian Gulf states oil to maintain its lifestyle/economy. According to George Bush senior: "Secure supplies of energy are essential to our prosperity and security. The concentration of 65 percent of the world's known oil reserves in the Persian Gulf means we must continue to ensure reliable access to competitively priced oil and a prompt, adequate response to any major oil supply disruption" (Barnett, 2001). The Gulf war in Iraq-Kuwait, both OPEC⁴³ countries, was an example of a US prompt response to the danger of oil supply disruption. Even though the recent war has been labelled "against terrorism", there are obvious

³⁹ Nineteen terrorists hijacked four commercial airplanes and crashed two of the planes into the twin towers of the World Trade Center in New York City, one into the Pentagon in Washington, D.C, and a fourth plane crashed in Pennsylvania, killing thousands people.

⁴⁰ See Heinrich Boell Foundation and UNED Forum (2001) for many different insights on this issue in the context of the run-up to the World Summit on Sustainable Development, which will take place in September 2002 in Johannesburg.

⁴¹ Other examples include the nuclear test ban treaty, international criminal court, ban on anti-personnel land mines, elimination of all forms of discrimination against women, rights of the child, and many environmental agreements including the Convention on Biological Diversity.

⁴² Mark Lynas, in *The Guardian*, 18 September 2001, "It's all about oil ... again".

⁴³ Organisation of Petroleum Exporting Countries.

connections with oil. With these facts in mind, and the understanding that fossil fuel reserves will eventually disappear (in the long run), there is probably no better compelling evidence for the US to support and join the Kyoto process. The Kyoto Protocol will lead to a gradual decrease on Parties' dependence on fossil fuels by decarbonising their economies. The extent to which this dependence is decreased depends on Parties domestic efforts vis-à-vis the usage of the mechanisms and sinks provisions. Russia's recent quarrel with OPEC also demonstrates the instability of global oil prices.⁴⁴ In summary, September 11 has given the US the incentive to join the Kyoto process in order to reduce its fossil fuel dependence, and consequently reduce its reliance and domination of certain Middle Eastern countries.

In light of the arguments briefly explored above it seems pertinent to develop scenarios of how the US will tackle climate change in the near future. Scenario A sees the US doing something nationally, or possibly regionally with Canada and/or Mexico, and nothing at the international level. This scenario follows the current administration line, which was described in section 3. Scenario B would see the US presenting a new global agreement on how to reduce greenhouse gases at COP-8. This scenario represents an explosive combination for the climate regime if it included developing countries who are not yet prepared to take on commitments until they see some leadership by developed countries as enshrined in the FCCC. In fact, Müller *et al.* (2001) examined some of the most prominent alternative proposals and concluded that neither intensity targets⁴⁵ nor price caps proposals or deferred abatement and technology-focused approaches would offer better solutions than Kyoto. Scenario C sees the US joining the Kyoto train before Rio+10. This is, under the present setting, an unlikely scenario, but still a possibility, for example, if the US starts framing the problem as reduction of oil dependency. Scenario D sees the US joining the Kyoto process during the second commitment period after much insistence by the US business community, which was left out of the first commitment period's new global carbon market. Scenario E sees the US backtracking on their previous pledges of action on climate change because of increased spending to combat terrorism.⁴⁶ This is, hopefully, an unlikely scenario because the problem of climate change will simply not go away. These are some of the possible scenarios, or mix of scenarios that the US could follow. Only time will tell which one takes place. At the Marrakech conference, the US was not inclined to follow scenario C, and thus mostly acted as a silent observer. Details of what occurred at Marrakech are described next.

6. Bargaining in the Marrakech Bazaar

The Marrakech meeting (COP-7) was supposed to complete the BAPA, based on the Bonn Agreement forged in July 2001, which had not ended with COP-6 or COP-6.5. The objective of this immensely technical meeting was clear: translate the Bonn Agreement into legal decisions that can be adopted by the COP. Even though matters discussed at COP-7 were extremely technical they quickly became political, dividing Parties until the last minute of negotiations. The major issues to be agreed at COP-7 revolved around: 1) how emissions shall be monitored, verified and reported (known in the jargon as Articles 5,7&8 of the Kyoto Protocol), 2) the compliance system, and 3) unresolved issues about the Kyoto mechanisms and sinks. Also originating from the Bonn talks was whether Russia would get twice as many sink credits as they were given. In the last day of negotiations the small closed negotiation group co-facilitators, Ministers from Switzerland and South Africa, presented a package that was acceptable to all Parties, apart from the Gang of Four. All-night negotiations concluded in the early hours of Saturday, after which the COP adopted all the decisions. A brief description of the almost 250-paged Marrakech Accords follows.

To the surprise of many, the compliance group finished negotiations before the ministers arrived. The adopted text honours the compliance section of the Bonn Agreement in its entirety, even though some

⁴⁴ The Guardian, 24 November 2001, "Russia rebuffs OPEC".

⁴⁵ These focus upon emissions per unit GDP and thus allow emissions to expand with economic growth.

⁴⁶ See Paul Johnson, Forbes, 26 November 2001, "American's coming battle with words and reason".

Parties wanted to water it down. Besides the features mentioned in section 4, some more detail was added to the compliance system in Marrakech. There will be opportunities for public participation in the compliance proceedings, which was a major victory for NGOs. If in non-compliance a Party will not be able to sell parts of its assigned amounts. There will be a Party-to-Party trigger. The facilitative branch will deal with issues regarding Article 3.14 and supplementarity. Within the enforcement branch, there are now also expedited procedures for the reinstatement of eligibility to participate in the mechanisms, a key concern for Umbrella Group members, in particular Japan. When the commitment period finishes in 2012, Parties will have one hundred days to evaluate compliance (this is known as the 'true-up' period). The thorny issue of "legally binding consequences" has been postponed until the Kyoto Protocol enters into force.

Issues relating to the Kyoto mechanisms and sinks will be dealt under Articles 5,7&8, because of its crosscutting nature. These articles essentially represent the engine of the Kyoto Protocol. They deal with issues such as monitoring, reporting and review, crucial activities to determine if a Party is in non-compliance as well as to measure the regime's effectiveness. At COP-7 important decisions pertaining to 5,7&8 needed to be taken, including:

- Reporting on LULUCF activities
- Composition of the expert review teams (ERTs)
- Reporting and review of Article 3.14
- Modalities for the accounting of assigned amounts (Article 7.4)
- Link to mechanisms eligibility.⁴⁷

The Marrakech Accords dealt with all these issues because of their importance for the Kyoto architecture. With respect to sinks, Parties are required to report on sinks activities annually and how these activities are directly human-induced, but failure to meet the quality thresholds will not endanger eligibility to participate in the mechanisms. This was a necessary compromise because otherwise Russia, who apparently does not have the capacity meet the sinks reporting requirements, would not be able to sell its massive surplus of carbon credits to the more 'needy' Umbrella Group members. The idea of georeferencing was abandoned, instead Parties will have to report the geographic location of the boundaries of each unit of land subject to Article 3.3 and 3.4 activities.

ERTs are teams that will analyse the data provided by each Party, apply any adjustments that have to be made and write reports highlighting any areas of potential non-compliance (Anderson, 2001); they basically audit the country reports. The composition of ERTs was another North-South divide, where the EU and the UG wanted members to be based primarily on technical knowledge, whereas G77/China wanted equitable geographic distribution. As a compromise it was decided: a) the team would refrain from making political judgements; b) the Secretariat would choose the members so that there is North-South balance, and try to achieve geographic balance, but without compromising the expertise; c) the team will be jointly led by an Annex I and a non-Annex I reviewer; d) training will be available for reviewers.

Regarding Article 3.14, Annex I Parties are required to report supplemental information as part of their annual report demonstrating how they are striving to minimise the impacts of response measures (that they take in their countries) on the more vulnerable developing countries.⁴⁸ OPEC countries, headed by Saudi Arabia, wanted this matter to be dealt with by the enforcement branch making it an eligibility requirement to use the mechanisms. However, developed countries did not allow OPEC to go this far, making 3.14 an issue dealt with by the facilitative branch. This is, nonetheless, a huge victory for Saudi Arabia and their 'buddies', as developed countries will have to show how the measures they are taking to combat climate change are making sure vulnerable developing countries are not being negatively affected.

⁴⁷ See Anderson (2001).

⁴⁸ Including countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products (Article 4.8 of the FCCC).

Considerable time was spent on Article 7.4 because it had not been discussed prior to COP-7 and because of the very distant views of Parties. This article deals with the nature of the assigned amount (AA; emissions allocation) and how or when other units should be added or subtracted. Other units include Emissions Reduction Units (ERUs) from JI projects and Certified Emission Reductions (CERs) from CDM projects.⁴⁹ At Marrakech it was decided that AAs would be fixed, based on the 1990 base year and the Annex B target. Additions and subtractions from units derived from the Kyoto mechanisms or sinks will be done in the end of the commitment period. The Marrakech Accords introduce a new unit, called the Removal Unit (RMUs), which will account for sink activities, under Article 3.3&3.4, and JI projects.⁵⁰ Another contentious issue was ‘fungibility’, i.e., if different credits (AAUs, ERUs, CERs, RMUs) can be merged and interchanged. For the G77/China this was a question of principle, because if CERs are the same as ERUs, which are only traded between developed countries who have quantified emission limitation or reduction commitments, then it implicitly implies that developing countries should have targets too. For the developed countries this would create four different markets, which was simply not economically efficient. In the end all units became fungible and can be transferred freely. Another problem was the issue of ‘banking’, i.e. if surplus credit could be carried over to the next commitment period.⁵¹ Many Parties were concerned that the vast amount of sink credits could be banked into the second commitment period, but the Gang of Four wanted full flexibility, i.e., banking of all credits. The end result tilted much more in favour of the Umbrella Group even though banking of RMUs is not allowed and banking of CERs and ERUs is limited to 2.5 percent of the assigned amount. This is simply a façade because Parties will be able to use these credits to meet their first commitment period targets and carry over the remaining pot of AAUs, CERs and ERUs; this is called ‘laundering’ of credits. Before the commitment period starts a Party will need to report whether the issuance and cancellation of AAU/RMUs from sink activities will be done annually or at the end of the commitment period. In order to monitor all the transfer of units the Secretariat will create a database that will log each transaction, where each unit will be identifiable by an individual serial number. Each transaction will have automatic checks to ensure that:

- Each Party is eligible to use the mechanisms
- There are no infringements of the commitment period reserve
- There are no infringements on the sinks caps
- That there are no unresolved discrepancies

In case of discrepancies, the Party will have to implement corrective action. Each Party will maintain a national registry, which will be publicly available through the Internet, where one can check the units and serial numbers a Party has in its account. An expedited procedure was agreed upon, at the insistence of Japan, for the review for the reinstatement of eligibility to use the mechanisms, after non-compliance with eligibility requirements.

Another hotly debated issue was the eligibility requirements for a Party to participate in the emissions trading regime. As usual the Umbrella Group wanted as lax rules as possible, whereas the EU and G77/China argued for strict requirements, for different reasons though. The criteria that were agreed after COP-6.5 said that a Party should:

- Be a Party to the Protocol
- Have satisfactorily established its AA
- Have its national system in place
- Have its national registry in place

⁴⁹ Trading within Annex I countries will be done with AAUs.

⁵⁰ Thus, CDM sink projects represent another loophole, but not as big in size as the others since it is fairly limited. The Marrakech Accords also allow unilateral CDM projects.

⁵¹ Banking of credits can be both positive and negative. Positive, because it gives an incentive for Parties to go beyond their Kyoto targets. Negative because it gives an advantage to Annex B countries against newcomers to the Kyoto regime in the future. This could complicate matters relating to target setting for the second commitment period for example.

For different reasons some Parties wanted to add the following to the list:

- Annual sinks inventories
- Link to the Commitment Period Reserve (CPR)
- Link to compliance
- Reporting supplementarity
- Reporting of Article 3.14

As mentioned earlier, Parties will have to submit annual sinks inventories, but its quality was downgraded in order to accommodate Russia. The link to the CPR was also lost. The link between compliance and the eligibility criteria was one of the main issues for Ministers to decide at COP-7. For the Gang of Four, this was a bottom-line issue, i.e., they did not want to see any linkage with compliance. Their argument went something like this: if we don't address issues under Article 3.14 appropriately, we could fall out of compliance, which in turn would mean we could not participate in the mechanisms. Even though 3.14 went to the facilitative branch instead of the enforcement branch, as desired by Saudi Arabia, any explicit linkage with the compliance system was erased. These issues will surely be taken up at the first COP/MOP when the compliance regime will be finalised. Like 3.14, supplementarity was erased from the eligibility criteria and put under the facilitative branch mandate. Many other issues – including NAPAs, bunker fuels used in international transportation, the IPCC Third Assessment Report – which are less relevant to the Kyoto architecture, were agreed at Marrakech and are discussed elsewhere (Dessai, 2001b).

7. Is it worth anything?

The earlier sections intended to distil the information contained in the Marrakech Accords, by providing some negotiation history and politics from The Hague until Marrakech. While almost everyone hailed the Marrakech Accords as another milestone in the combat against climate change, was the Kyoto Protocol really saved or indeed sunk further? This section will try to evaluate and analyse a year of face-saving climate negotiations. We start with the drawbacks.

It is relatively easy to criticise the Kyoto regime, as President Bush and other experts have done (cf. Reiner and Jacoby, 2001; Soroos, 2001; Victor, 2001). Many commentators will surely argue that it is almost meaningless to worry about “the Marrakech dilution of the watered down Bonn Agreement to the fatally flawed Kyoto Protocol to the UNFCCC.” The weakening of the Kyoto Protocol, or Kyoto ‘lite’ as some NGOs put it, is a genuine concern. The sacrifice of environmental effectiveness for economic flexibility was the price to pay to keep the Umbrella Group on board the process without US participation. Compared to the original Kyoto Protocol (here called pre-COP-6 Kyoto), we now have a regime with substantial amounts of sinks in the form of either forests or agricultural lands.⁵² With so much emphasis on sinks, it is hard to believe that any energy emissions reducing projects will be taken up in the CDM. In fact, agricultural practices are not even capped, unlike forest management, representing a potential loophole. Afforestation and reforestation are now allowable activities under the CDM.⁵³ Sink credits were bluntly handed out to whoever needed them in Bonn, and the more you bullied the more you got; cf. Russia who got its Bonn deal doubled in Marrakech after much insistence.⁵⁴ It was an especially bad precedent to remove the quality of sinks reporting as an

⁵² The pre-COP-6 Kyoto already had a large potential supply of surplus emissions quota from Russia and other EIT, pejoratively known as ‘hot air’.

⁵³ Rumours have it that the deal that was ditched in The Hague did not have sinks in the CDM.

⁵⁴ It is difficult to understand Russia's reasoning behind this insistence because one of the end results is a drop in the price of carbon. Vagely similar strategies have been applied by Russia against the OPEC cartel in order not to cut oil exports (cf. Guardian, 15 December 2001, “Baron who beat the sheikhs”). These efforts seem to be

eligibility requirement. In effect, what Russia and their pals in the Umbrella Group are doing is to demand huge amounts of sink credits⁵⁵ for which they will never be accountable. Under the Bonn agreement and without US participation it is expected that demand for CDM projects will be relatively small (Jotzo and Michaelowa, 2001). Supplementarity, a former perennial issue for the EU and environmental NGOs, has now become an arcane item within the accords.⁵⁶ Units resulting from the use of the Kyoto mechanisms and sinks are all fungible and interchangeable. In effect, all the units Annex I Parties will have a surplus of (compared to their assigned amount) at the end of the commitment period will be carried over to their second commitment period, leaving 'new comers' to the regime in a fairly disadvantaged position. The decision about the "legally bindingness" of the compliance system, a matter dear to many Parties and NGOs, was postponed until the Protocol enters into force, at Japan's insistence. Needless to say that the pledge by some developed countries⁵⁷ to contribute €450 million is utterly inadequate to tackle the on-going and future impacts of climate change in the most vulnerable developing countries, whose contribution to the problem is, in some cases, virtually zero. More troublesome is that some of the highest per capita emitters, including Australia, the US and Japan, failed to contribute anything to assisting developing countries cope with the consequences of climate change. One of the disadvantages of this package framework is that it created a complex regime with an overwhelming number of institutions. Each institution has its own rules of procedure (some simple, some complicated) and configuration in a sea of acronyms that is only understandable to a handful of experts in the world. One could say the climate regime is suffering from 'bureaucratic entropy' due to the creation of an excessive number of institutions.⁵⁸ It is virtually impossible to get a holistic perspective of the whole climate regime. Initial modelling of the Bonn Agreement showed that the environmental effectiveness of the agreement dropped from the 755 MtC that would have been reduced in a pre-COP-6 Kyoto to 130 MtC, whereby 520 MtC are due to the US withdrawal (den Elzen and de Moor, 2001).⁵⁹ This watered down agreement was the result of numerous concessions that had to be made because of the pivotal position the Gang of Four retain, if the Protocol is to enter into force. But did the hard bargaining of four countries leave the rest of the world (minus US) with an unworkable or virtually insignificant framework? It doesn't appear to be so. Arguments in favour of the regime are abundant.

Probably the most important feature of The Hague-Bonn-Marrakech process is that it finalised the Kyoto architecture, i.e., there are no more unresolved issues that would prevent Parties from ratifying the Protocol.⁶⁰ We now know exactly how the Kyoto Protocol will work for the next decade, until the end of the first commitment period, in 2012. Despite the flaws mentioned above, the Marrakech Accords represent the culmination of 10 years of negotiations on one of the most complicated global problems of this century. As Ambassador Assadi put it, "of course, we could always speculate on the contours of a perfect, ideal agreement, that may exist on paper only and rarely, if ever, as the practical, tangible outcome of a multilateral negotiating process."⁶¹ Multilateral processes are inherently a cumbersome process as efforts are made to accommodate the interests and expectations of as many as 180 diverse sovereign states (Soroos, 2001). This is the reason why global negotiations have been so

aimed at gaining short-term economic benefits to boost the economy, whilst forgetting the long-term perspective. There is clearly a lack of internal coherence in their strategy to tackle climate change or oil resources.

⁵⁵ Which, for the most critics amongst us, represents a re-negotiation of the targets agreed at Kyoto.

⁵⁶ According to one delegate: "The EU took a very public beating in Bonn, by not being able to explain how its own proposals [on supplementarity] would be operationalised in a context of international trading".

⁵⁷ It is astonishing that the EU, who played a leadership role in the negotiations, is already backtracking on this matter; the European Commission already envisages a shortfall in Member States contribution to this effort. See COM(2001) 579.

⁵⁸ I thank Tim O'Riordan for this insight.

⁵⁹ Nordhaus (2001) concluded that without the US, global CO₂ emissions would be about 1 percent below "business as usual" during the first commitment period. These estimates, however, do not include reductions in targets due to new provisions regarding sinks and other technicalities of the Bonn agreement.

⁶⁰ Except maybe the US, who is opposed to the whole Kyoto process because of the reasons elaborated in section 3.

⁶¹ Statement by Ambassador Bagher Assadi, Chairman of the Group of 77 (Islamic Republic of Iran), before the Second Committee of the General Assembly on Agenda item 98 (f): protection of global climate for present and future generations of mankind. New York, 28 November 2001.

complicated, rendering a convoluted outcome that, in the author's opinion, still honours the Bonn Agreement, and more distantly the Kyoto Protocol. The Marrakech Accords have dealt with many developing country concerns with respect to Convention obligations, including capacity building and technology transfer. A welcome innovation was the establishment of three new funds for developing countries, mainly to fund projects related to adaptation to climate change, a much-neglected area of climate politics (cf. Sarewitz and Pielke, 2000). This a good omen that the FCCC process is starting to take a more holistic approach to climate change, and not almost exclusively focusing on climate mitigation through its Kyoto Protocol. In essence these funds and the financial pledge of €450 million by some developed countries was the *quid pro quo* for G77/China to accept the rest of the deal. The upshot of the Marrakech Accords for the Kyoto mechanisms are numerous. The structure and processes of these instruments are now well defined, thus effectively creating a carbon market where international emissions trading between developed countries will start in 2008. Additionally, CDM projects that meet the criteria can be credited since the year 2000. Another bonus from the accords is the possibility of having 'unilateral' CDM projects, where a developing country Party can undertake the project itself and then sell the credits accrued in the international market. Members of the CDM Executive Board were elected at Marrakech, where they held their first meeting. The accords have also brought clarity about how emissions will be counted, traded, subtracted and added. This was of crucial importance for the assessment of compliance. There is relatively little that can be said in favour of the sinks section of the accords except that it provides the ample flexibility demanded by the Gang of Four and pushed to the extreme by Russia. From COP-6 to COP-7 the compliance system evolved considerably to become one of the most sophisticated and far-reaching systems of its kind. Even though the legally binding clause was not adopted, Parties that are in non-compliance will have to restore an extra 30% in the second commitment period and prepare a compliance action plan. Even if one is critical of the achievement, one should look at the first commitment period as a 'learning by doing' experiment, which will be improved in subsequent commitment periods. As Nordhaus (2001) notes, this process brings 'institutional innovation' with the first experience with market instruments in a truly global environmental agreement. The efforts that ministers, government officials, NGOs and the FCCC Secretariat have put into the Marrakech Accords, in times of international insecurity, are a proper example of human ingenuity and international cooperation.

Insights from an international relations scholar perspective can be useful to understand the climate negotiations. The climatic collapse in The Hague was a blessing for realists, lacking environmental examples of power struggles. Realists would argue that the barraging power between the US and the EU was so equal that an agreement was not possible. Realist theories are mostly based on power and the existence of a 'hegemon'. Clearly there is no more hegemon, if there ever was one, in the climate regime. The 'traditional' hegemon, the US, neither took a leadership role, nor an obstructionist role in Bonn or Marrakech. While not being the climate hegemon, the US indirectly affected the Marrakech Accords by giving 'ratification power' to the rest of the Umbrella Group, in particular to the Gang of Four. It will be interesting to see the future dynamics of this informal group now that the US is alienating itself from the Kyoto process. Knowing that the Protocol would not enter into force without their ratification – here called 'veto power' – the Gang of Four extracted as many benefits as possible from other Parties, very much in line with neorealist theory. Though the Gang of Four had incredible 'veto power', they did not prove to be the hegemon of Marrakech or Bonn. This is because climate negotiations are a clear example of 'give and take'. Although the Umbrella Group might have taken the most, they also had to give some, for example regarding Article 3.14 (the OPEC clause) or the composition of boards or committees. If there is any framework that best fits the Bonn-Marrakech process it is probably the one advocated by regime theorists.⁶² According to these scholars regimes facilitate cooperation by building trust between parties, transferring information and resources, and highlighting free-riding. Business and environmental NGOs, and the Secretariat helped shape Parties perceptions, which ultimately created the Kyoto regime, which is now inscribed in the Marrakech Accords. Sometime around the year 2014 we will be able to measure the effectiveness of the regime that was created last month. While the EU proclaimed itself leader of the climate regime throughout the year 2001, especially after Bush denounced the Kyoto Protocol, Parties still have a mixed

⁶² In its modified structural approach.

perception about the EU's leadership role. The EU played a very important role in rallying support for the Protocol, without which the regime probably would not have formed. It appears that the EU has learned its lesson from The Hague – avoid being in the EU 'bunker' discussing amongst each other; instead negotiate with other Parties – but it still looks as if the EU is a leader by default. This perception could simply be a result of the bargaining leverage of the Umbrella Group, which got almost all they wanted, but it seems that the leader seat is there for the taking. Leadership by example will be crucial in the next couple of years. Let's see if the EU is up for the job.⁶³ Recent reports have been promising with some Member States (e.g. Sweden) taking tougher targets than their Kyoto commitments without the use of carbon sinks or flexible mechanisms, thus denouncing the 'freebies' introduced into the accords by the Gang of Four. The G77/China played a critical role throughout the negotiations. They did particularly well in Bonn, but have been criticised (cf. Loong, 2001) for not seizing gains in Marrakech, where they were being handed out to the Gang of Four. The real question is whether they could have gained much more after the developing countries package had been agreed in Bonn? Probably not. It is still surprising to see how many concessions were given in favour of OPEC countries, under Article 3.14. Also remarkable was the "narrowing per capita differences between developed and developing countries" language inserted in the mechanisms text. Overall, G77/China – a very hard group to keep together because of its diverse interests – ranked highly in their performance, partially due to an excellent presidency of the group by Iran.

Some of the negative and positive aspects of the Marrakech Accords and its development have been presented. It is difficult to evaluate the overall outcome but this analogue between bargaining in the *souks* (market) of Marrakech and bargaining in the climate negotiations intends to do this.

<i>Rules</i>	<i>In the Souks ...</i>	<i>In the climate negotiations ...</i>
First	bargaining is entirely natural	multilateral processes are all about bargaining
Second	don't pay attention to the initial prices	in the beginning of a COP, Parties positions can be very divergent, don't pay attention to that
Third	don't ever let a figure pass your lips that you aren't prepared to pay	at The Hague, neither of the Atlantic powers were prepared to pay even after showing all their sink numbers
Fourth	take your time	a complex problem such as the design of a system to reduce greenhouse gas emissions takes time ⁶⁴
Fifth	paying more than local people doesn't necessarily mean you're being 'ripped off'	giving concessions to the Gang of Four does not mean we 'ripped off' or cheated the Protocol
Sixth	never go shopping with a hustler	don't negotiate with the US if it is acting as a hustler

"Whatever you buy, and wherever you buy it, you will be expected to bargain. There are no hard and fast rules – it is really a question of paying what something is worth to you."

(Ellingham *et al.*, 2001).

Institutional bargaining was a major feature of The Hague-Bonn-Marrakech process. The real question we should be asking is not whether the Protocol was sunk or saved, but if Parties have paid what they think the Protocol is worth. In general, it appears Parties perceive they have paid the right price.⁶⁵

⁶³ For a more in-depth analysis of how the EU has dealt with the problem of climate change see Lacasta *et al.* (2002).

⁶⁴ One year behind schedule is not too bad.

8. Where are we heading?

Now that we have the Kyoto architecture in place we can rest assured that the problem of climate change has been taken care of, right? Not at all. Kyoto is but the first step in a very long journey to stabilise GHG emissions at a 'safe' level.⁶⁶ From the evaluation performed in section 7 it appears the first commitment period will resemble more a 'test drive', than the 'tough' emission reductions envisaged by Parties in December 1997 when the Protocol was adopted. The impact of the Kyoto Protocol in the climate system will be almost negligible (cf. Dessai and Hulme, 2001; Wigley, 1998), but this will be dependent on the targets set during future commitment periods and the underlying development path the world will take during this century. Having this in mind, some final thoughts on where the climate regime is heading are briefly presented.

The Kyoto architecture is now in place, but there are always some details that need to be fleshed out a bit further. The Marrakech Accords have introduced a number of new sinks activities that will need proper reporting, accounting and verification. According to some experts (cf. Nilsoon *et al.*, 2001), mainly due to the inclusion of biospheric sinks it will be impossible to know whether mean fluxes are rising or falling over the five year commitment period of the Kyoto Protocol, thus rendering precise determinations on compliance virtually impossible. These are some of the issues the IPCC will have to overcome in their good practice guidelines, which is due at COP-9, with respect to methods and guidelines for reporting information on LULUCF activities. It will be crucial, but probably difficult, not to politicise this IPCC process so that definitions and modalities of sink projects are based on sound science. COP-8 and COP-9 will also deal with the remaining technical issues of the Kyoto accounting system. The question of "legally binding consequences" will resurface at the first COP/MOP for yet another battle amongst Parties.

Now more than ever, each country needs to push their domestic constituencies to develop plans and programmes that will enable the fulfilment of their Kyoto commitments. Legge and Egenhofer (2001) have coined this next phase as "the regionalisation of the Kyoto Protocol." Just before the Marrakech meeting, the European Commission adopted a major package of decisions on the ratification of the Kyoto Protocol, the implementation of the European Climate Change Programme, and a framework Directive for greenhouse gas emissions trading within the European Community.⁶⁷ This effort represents considerable progress towards ratification, but the EU should not be complacent. European bureaucracy can be complicated because of shared competences between Member States and the European Commission,⁶⁸ the complicated EU burden sharing agreement⁶⁹ and Member States politics and interests. This is an on-going process that needs to be concluded as quickly as possible so that the Protocol may enter into force by the time of the World Summit on Sustainable Development (WSSD). This is the EU's opportunity to show 'directional leadership' i.e., leadership by example, to Parties unconvinced of EU 'climate leadership'. EU ratification by itself will not make the Protocol

⁶⁵ Baer and Athanasiou (2001) answered the same question in other words: "this is not a good deal, but there is no reason to believe that a better one was possible in the past, or will be possible in the future if this one is derailed".

⁶⁶ In fact, much research and discussion needs to be conducted on defining what 'dangerous' levels and rates of climate change are because they are essentially value judgements.

⁶⁷ The respective documents are: COM (2001)579, COM (2001)580, COM (2001)581.

⁶⁸ Each Member State legislature will have to ratify the Kyoto Protocol as well as the European Community.

⁶⁹ Using Article 4 of the Kyoto Protocol (also called 'joint fulfilment'), the European Community is allowed to redistribute its -8 percent target among its members states; whilst countries like Germany or the UK will reduce emissions by much more than 8 percent, while Portugal and Spain will actually be allowed to increase their emissions.

international law if other key Parties do not accompany it, so it seems crucial to continue its diplomatic endeavours to reach the 55 percent threshold before the Rio+10 Summit.⁷⁰

The importance of Rio+10, or WSSD, which will take place in September 2002 in Johannesburg, needs to be explored in the context of climate change. WSSD will celebrate the tenth anniversary of the adoption of the FCCC. A review of the accomplishments of the Convention to date will be performed. Unfortunately, there is little to show for the Convention's voluntary targets of returning emissions to 1990 levels by 2000, except for some 'flukes'. These include the cases of the UK, Germany, Russia and EITs, all of whom reduced emissions for reasons unrelated to 'climatic' concerns.⁷¹ Focus will be aimed at the Kyoto Protocol and the recently agreed Marrakech Accords. The Protocol, a three-year-old baby, has little to impress with – except hundreds of pages of FCCC documents – in the face of worldwide growing emissions. It is thus crucial that the developed countries quickly adopt their national plans and ratify the Kyoto Protocol so that it enters into force by the Johannesburg Summit. This will be their only face-saving strategy for the review of the Convention commitments. The Marrakech Ministerial Declaration, which provides the input of the FCCC COP to WSSD, was, according to environmental NGOs, severely weakened to the point that they had to write "the real Marrakech Declaration." The Ministerial Declaration lacks the vigour that environmentalists would like to see concerning the provision of clean energy to the world's poorest people, disparity of per capita emissions, etc. Though WSSD will tackle many issues from poverty alleviation to environmental issues, of particular relevance to the climate regime will be the synergies between Conventions. With the inclusion of a widespread number of sink activities in the Marrakech Accords, it will be important to prevent any conflicts with the Convention on Biological Diversity (CBD). Also relevant will be synergies with the Convention to Combat Desertification (CCD).⁷² The agenda-setting process of WSSD is on-going so we should get a clearer picture of where this fora is heading towards in the next couple of months. However, it is clear that whatever happens in Johannesburg will be directly relevant to the climate regime, because climate change is essentially a long-term developmental and environmental problem.

The past year of climate negotiations has made it clear how important adaptation to climate change will become in the coming decade. No matter how fast climate mitigation will take place in the next decades we are already committed to some degree of climate change to which societies will have to adapt.⁷³ The IPCC TAR concluded that those with the least resources have the least capacity to adapt and are the most vulnerable (IPCC, 2001). This has captivated the interest of LCDs and other developing countries in trying to operationalise adaptation within the FCCC. At Marrakech, these countries were successful in designing guidelines for the preparation of National Adaptation Programmes of Action (NAPAs) and the establishment of a LDC expert group, whose objective is to advise on the preparation and implementation strategies for NAPAs, amongst others. These are just the initial steps of a much more complicated process that is taking its first concrete steps within the FCCC process. There are many methodological issues⁷⁴ that will have to be dealt by SBSTA and IPCC in order to get adaptation projects 'up and running' in the next decade. In effect, the process of 'mainstreaming adaptation' into the FCCC process has started, but it still has a long way to go. It is also crucial not to forget that the most vulnerable countries will most likely lack the technologies to adapt to climate change, thus making technology transfer of the utmost importance.⁷⁵

⁷⁰ A good recent example came from John Prescott, who urged the world's biggest per capita emitter, Australia, not to hide behind the US and use this as an excuse not to do anything. AAP, 4 December 2001, "Australia warned on Kyoto".

⁷¹ The UK shifted from coal to natural gas. West Germany reunified an economic collapsed East Germany. Russia and EIT's emissions reductions are due to the collapse of the former Soviet Union.

⁷² For example, there are ideas of merging secretariats of Conventions (FCCC, CBD, CCD, Ozone depleting substances, etc.) into one big secretariat in order to enhance the linkages and minimise conflicts, or creating a World Environment Organisation.

⁷³ Mainly because of past historical emissions.

⁷⁴ For example, methods and tools to evaluate impacts and adaptation (see FCCC/SBSTA/2001/INF.4) need to be further explored and elaborated.

⁷⁵ Both in the adaptation and mitigation side of the problem.

The creation of three new funds from the Marrakech Accords (special climate change fund, LDCs fund and adaptation fund) for developing countries, will keep the FCCC agenda occupied for many years to come. Issues relating to the funds will start being discussed at COP-8. Parties will have to address questions like: What are predictable and adequate levels of funding for non-Annex I Parties? What is the most appropriate modality for burden sharing among Annex II Parties? How can donors demonstrate that the funds are new and additional? This is only a glance at some of the issues that will have to be tackled in the near future.⁷⁶ Though the G77/China lost their battle over mandatory funding from developed countries in Bonn, this issue could be brought up in the run-up to second commitment period target negotiations.

It is very difficult to predict how the future geopolitical configuration of the world might look like in times of such insecurity, but a few remarks need to be made about this. COP-7 was the first major intergovernmental conference after the events of September 11 and it succeeded in its objective, i.e., the completion of the Buenos Aires Plan of Action. The second major conference took place in Doha, in the small Gulf state of Qatar, under the auspices of the World Trade Organisation, from 9-14 November 2001. "The meeting was characterised by sly diplomatic intrigue, brutal arm twisting, pompous political grandstanding and foul humour."⁷⁷ Any resemblance to the climate negotiations is pure coincidence! Probably the most publicised upshot of this conference was the accession of China to the WTO, which now caters for an additional 1.3 billion consumers.⁷⁸ The conference launched an ambitious three-year program that will tackle numerous issues,⁷⁹ including the complex relationship between multilateral environmental agreements and trade rules. Interactions between the Kyoto Protocol mechanisms and the WTO will need to be further explored because of the potential conflicts between these two systems (cf. Kim, 2001; Werksman *et al.*, 2001). While both conferences were taking place the 'war against terrorism' continued "by day and by night, in the light and in the shadow, in battles you will see and battles you won't see."⁸⁰ The fight against terrorism will be a long one, but so will the one against climate change; in fact much longer. It is clear that the world (minus the US) fulfilled, to a certain extent, their responsibility before the problem of climate change by going ahead with the adoption of the Marrakech Accords. It is also clear that it is imperative to bring the US back into the game. While it might be possible to ignore the US in other contexts (cf. Murphy, 2000; Washburn, 1996), global warming does not allow us this luxury. The 'indispensability and indefensibility' of US climate policy (Agrawala and Andresen, 1999) is clearly at play here. As Soroos (2001) has pointed out, allowing the US to free ride raises deeper issues of equity for the international community as a whole that could strengthen the resistance of developing countries to accede to the Kyoto regime in future commitment periods. The world cannot let the US free ride in a matter of such importance. Climate change is not a problem that will simply go away, it is a century-scale 'global commons' problem. Emissions by one country affect more than 180 countries. When this country is the largest emitter of greenhouse gases in the planet, it almost seems ludicrous to have a regime that does not include this important player. The US needs to start tackling climate change in a responsible and serious manner; if not through the FCCC process, then other avenues should be used, but something must be done to curb growing emissions. Section 5 presented some plausible scenarios of where the US could head for with respect to climate change. The scenarios probably simplify a complicated internal process of policy-making that according to Lee *et al.* (2001) require several layers of approval⁸¹ and changes in long-standing perceptions and values, which ultimately result in a large inertia within the US governance system. A twin-track approach could speed up this process. First, at the national level, continue and intensify the domestic pressure by business (e.g., Pew Center members) and environmental NGOs so that far-reaching climate mitigation policies (that are

⁷⁶ This work is likely do be done in conjunction with GEF, the financial mechanism of the GEF.

⁷⁷ Time magazine, 26 November 2001, "Doing a deal in Doha".

⁷⁸ It is important to note that China, unlike popular belief, has reduced its GHG emissions in the past five years as a result of radical reform of its coal and energy industries (Streets *et al.*, 2001).

⁷⁹ E.g., agricultural subsidies, a new competition framework, equal treatment for foreign investors, customs procedures, improve market access, etc.

⁸⁰ President Bush on 17 October 2001.

⁸¹ Including that of the US Senate, a body that reflects a wide spectrum of interests and philosophies (Lee *et al.*, 2001).

compatible with the Kyoto framework) are introduced by the Bush Administration's cabinet level policy review and other legislation. Second, at the international level, all the Parties that agreed to the Marrakech Accords must continue the diplomatic pressure on the US until it rejoins the regime, whose architecture, ironically, is mostly American. Up to date, only the UK, the US's closest ally in the 'war against terrorism', has spoken out on this issue, possibly because of this close friendship, which gives it leverage to talk about climate change in times of such uncertainty.⁸² Other countries must join this appeal to the US at the same time they stay faithful to the Marrakech Accords.

Last, but certainly not least, lies the issue of second commitment period targets. This explosive thorny matter will start being discussed informally in the next couple of years, and formally within the FCCC process between 2005 and before the start of the first commitment period in 2008, when the targets will have to be set. If the US is not on board at the time, it will be increasingly difficult to gather other supporters from outside Annex I. It is also clear that some developing countries are keener than others in joining the Kyoto-Marrakech train. Voluntary measures will likely have to be explored. Many different frameworks, like the Brazilian proposal (Meira Filho and Miguez, 2000), per capita entitlements (Baer *et al.*, 2000, Meyer, 2000) and others will have to be considered. The problem of climate change still needs much human ingenuity to be solved because of the scientific, technical and ethical issues it raises. The Kyoto-Bonn-Marrakech Accords are only a starting point in a long journey that will carry on for decades. Hang on to your seats! There is much more to come.

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⁸² The Independent, 7 December 2001, "Margaret Becket: The US must join the world on climate change".

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