

What happened in Marrakech?

COP-7 and recent agreements on the implementation of the Kyoto Protocol

by

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I. INTRODUCTION

One of the participants in Marrakech¹ described the city and the events at COP-7 together as follows: “The city is beautiful and delightfully foreign, the people hospitable, and the food very good. I highly recommend a visit. Be prepared, though, to bargain and to drink copious quantities of mint tea. In fact, the city is one large bazaar—not unlike the setting at COP-7, which traded significant economic benefits in exchange for retaining the momentum built at Bonn toward a Kyoto-in-force.”

To describe this “diplomatic bazaar,” we start off by reviewing the main interests and positions of the involved parties (section II.A).

We then go on to provide an overview of the main results of the meeting (section II.B). The results are discussed in greater detail in section III. We focus on the agreements concerning mechanisms (dealing in particular with tradable permits programs), sinks, and compliance.

Future perspectives and conclusions are provided in section IV. After the WSSD meetings in September, COP-8 will meet in India October 23-November 1, 2002.

II. OVERVIEW

II.A. Key interests of parties involved

II.A.1. Country interests

The basic positions of the big groups of countries at Marrakech can be characterized as follows:

- The EU and G-77 plus China (developing nation) groups were very committed to finishing work on the Protocol and to ratification.
- The (new) Umbrella Group (Japan, Canada, Russia, Australia, New Zealand) held out for additional Treaty benefits, and largely succeeded. However, post Marrakech,

¹ William Christian (Cadwalader, Wickersham & Taft, Washington, D.C.). This report draws heavily from material presented by Mr. Christian at the meeting of the Emissions Marketing Association (EMA) in May 2002.

several key countries (particularly Canada) have expressed concern about the economic effects of ratification, especially absent US participation.

- Despite its withdrawal, future US action will be quite important in determining the path that global climate negotiations follow. The US delegation took very little overt part in the Marrakech proceedings, unlike its pivotal role in earlier sessions. The US statement expressed opposition to the KP, but promised future action addressing climate change. A brief comment on the Bush Administration position, released in February 2002 in conjunction with a larger air quality announcement, is in order. The US position was predictably and rather roundly denounced by the EU and other COP groups. Few observers appear to remember that the Clinton administration also had not immediately planned to ratify the Protocol. It is highly likely that the current situation with respect to international policy on climate change would be quite similar if Al Gore had become President.

II.A.2. Business interests

While apparent in earlier sessions, the international divide among business groups over the Kyoto Protocol was striking at Marrakech. Most European and many multinational US business firms have expressed support for the Protocol, and their advocacy focuses on how to achieve the goals of the Treaty efficiently and without undue economic or bureaucratic constraints. Even the petroleum, electric utility, and chemical industries are split. While there is no question that US opposition to the treaty is soundly based upon the economic and physical difficulties of satisfying the Treaty in the 1st commitment period, political and business leaders from outside the US are uniformly harshly critical of the failure of the US to participate in some meaningful fashion in the process. Whether or when this will translate into reputational or other problems for US-based entities operating outside of the US is unclear, but could develop into a strategic factor in world markets if climate concerns grow.

II.B. Key results of COP-7

Overall, COP-7 resulted in a ratifiable instrument, which most nations have committed to adopt prior to the World Summit on Sustainable Development (WSSD). The Summit, to be held in September 2002 in Johannesburg, South Africa, will celebrate the 10 year anniversary of the 1992 Rio conference. The Kyoto Protocol could thus be placed into force within a year,

if the requisite number of nations adopts the treaty through domestic action. The requirements are as follows: To enter into force, 55 parties representing 55% of Annex 1 (developed world) CO₂ emissions as of 1990 must ratify the treaty. Since US was responsible for about 36% of 1990 emissions and has refused to ratify, positive action by virtually every other Annex 1 nation is critical.

The European Union ratified the Kyoto Protocol on May 31, submitting its ratification instruments to the United Nations. EU Member States. Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom completed their domestic ratification processes in time for the EU deadline. The EU aimed for the May 31 deadline in order to make possible entry into force of the Kyoto Protocol by the World Summit on Sustainable Development in Johannesburg in August.

With the recent ratification of the Protocol by the EU and Norway, the total number of countries having ratified rises to 70, surpassing the 55 threshold needed for entry into force. Annex I countries having ratified the Protocol represent 26.9% of that group's 1990 CO₂ emissions. Romania and the Czech Republic are the two other Annex I countries having ratified the Protocol. Entry into force, therefore, is dependent on ratification by Japan and Russia to meet the required minimum representation of 55% of Annex I (developed) countries' 1990 CO₂ emissions by ratifying Parties. Indeed, the Japanese Environment Minister Hiroshi Oki announced on May 24 that the Cabinet would approve ratification of the Kyoto Protocol in June. He said that the Japanese government would submit the country's ratification documents to the United Nations immediately afterwards. The Lower and Upper Houses of the Japanese Diet approved the Kyoto Protocol on May 21 and 31, respectively.

While a number of nations have already ratified the agreement, whether the Treaty will in fact enter into force by this fall is somewhat problematic, since time is short and there are several serious issues embedded in the language adopted at COP-7 with which key parties are still not satisfied. If the WSSD goal is not reached, ratification may languish.

The Bonn agreements had left three very important, contested issues to be agreed and placed into specific legal language at Marrakech:

- Sinks,
- (market-based) mechanisms, and

- enforcement/compliance.

It is noteworthy that the COP-7 negotiators formally reached agreements on each of these issues – we discuss them in detail in the following section -, but the agreements left key underlying questions undecided, many until after the Treaty enters into force. The most important of these is whether the individual country greenhouse gas reduction targets will be enforceable. This is especially problematic since, as argued in the accompanying survey by Schneider and Wagner (2002b), monitoring and enforcement has come to be one of the crucial parts of well-functioning and cost-effective pollution control strategies. Conceivably, the KP could be placed into force but remain a voluntary instrument. Most observers agree that this would be a most unfortunate and unworkable result.

III. SPECIFIC RESULTS

We now will discuss the major results of the meeting in Marrakech. These concern agreements on mechanisms (III.A), sinks (III.B), and compliance (III.C).

III.A. Mechanisms

III.A.1. General aspects

Substantial work still needs to be done to flesh out the specific rules for both project-based and national emissions trading systems. However, COP-7 did make significant progress in developing the complex requirements for eligibility, registries, reporting, and other procedures. The members also selected the initial 10 member Executive Board and alternates for the CDM. The three initial meetings of that Board have confirmed fears that the Board will not exercise much independence from the COP in defining rules and approving projects. In its first three meetings, the Board has established initial procedural requirements for large CDM projects and expedited rules for smaller projects. The rules appear to be quite complex; large projects will individually need COP/MOP approval to receive final authorization. This casts severe doubt on whether cost-effective measures will be achieved.

The equivalent Supervisory Board for Joint Implementation has yet to be established, but will have representatives from developing nations, and may be likely to adopt the CDM requirements for JI projects, which may well make all project mechanism approvals cumbersome and costly.

It is clear that eligibility to participate in any Kyoto emissions trading activities—CDM, JI or national systems, selling or buying—will hinge on compliance with multiple Kyoto requirements, including national inventories, established registries, and meeting emission reduction obligations. How this requirement will fit with the need to assure projects of long-term credit generation is unclear—if a nation is suspended from trading, credits would presumably disappear or have to be sold elsewhere during the period of suspension.

While the specific requirements for baseline determinations, verification, and additionality are as yet undefined, it does appear that financial additionality will mean only that the project will not displace concessional (i.e. international body lending) funding, and will sensibly not require a showing that, but for the carbon credits generated, the project would not have proceeded for financial reasons. Environmental additionality must be shown, and baseline determinations appear to be a future, critical battleground in which the success of project-based emissions trading will be determined.

As noted above, all the emission reduction units from each mechanism will be fungible—that is, mutually exchangeable—but different limits will exist on the amounts of each unit that can be created and their life spans. A new unit, the RMU, or removal unit, was created at Marrakech to represent reductions from sinks activities. RMUs are not bankable. Other project-based units can be banked—carried forward until the next compliance period-- but only up to 2.5% of the assigned amount for each nation.

The G-77 nations have typically disfavored all emissions trading systems, believing that reliance upon these devices may relieve Annex 1 nations of the hard job of reducing their domestic emissions. There are increasing signs, though, that the developing nations see economic opportunity inherent in the growth of the project based mechanisms. Whether this perception will grow strong enough to overcome the momentum toward complex, bureaucratic, restrictive rules and procedures is questionable.

III.A.2. Tradable permits

Unfortunately, agreements on the Kyoto mechanisms at Marrakech do not yet hold out great promise that permit trading activities under the Treaty will be simple, cheap, or fast. Although the parties agreed that emission reduction units created under all of the mechanisms will be fungible, other provisions having to do with registries, reporting, eligibility, baselines, and additionality threaten to be bureaucratic and complicated, and often remain to be defined by supervisory committees that do not appear to be familiar with or sympathetic to workable emissions trading systems.

Nevertheless, around the world companies are preparing for a global greenhouse gas market (see Schneider and Wagner (2002a)). Also, some key national participants (e.g., Brazil, Russia, some African nations) see economic promise in the Clean Development Mechanism and Joint Implementation schemes, and may push to create workable systems. The CDM Board was appointed at COP-7, and has, at this writing, held three meetings.

Contrasted with some significant, continued pessimism surrounding emissions trading under the Kyoto Protocol by the G77, there was much discussion and considerable enthusiasm for the economic importance of emissions trading systems among a number of EU participants. With the exception of several skeptics (e.g., Germany, which appears to have moral objections), most of the EU has concluded that emissions trading will be needed to efficiently meet the burden sharing agreement, which allocated the Treaty's overall 8% EU reduction target to individual nations. The EU-15 overall is presently just below 1990 levels, but at projected growth rates, many individual countries will exceed their targets by a considerable margin, and the EU bloc may have to make on the order of a 7% reduction by the start of the first compliance period. The EU, Denmark, and the UK have proposed or adopted separate (presently incompatible) emissions trading systems, largely experiments to determine whether and how emissions trading will work during the first commitment period (2008-2012). The accompanying report (Schneider and Wagner 2002a) summarizes the experiences of the UK so far.

Side events at COP-7 also covered the progress being made in setting up project-based CDM and JI systems, and the impending problems with bureaucratic drag being added to these mechanisms by the COP negotiations. Several environmental NGO panels critically reviewed trading systems, and especially the rules for inclusion of credits based upon sinks. A number of panels from individual G77 nations (e.g., Brazil, India, and Thailand) glowingly

described their opportunities for CDM projects. And the alternative energy providers were there, along with the nuclear industry, seeking to participate on a favored basis in the emission trading systems (or on a not disfavored basis, in the case of nuclear power).

Summarizing, emissions trading now appears to have become widely accepted as essential to meeting reduction targets efficiently. Even the most previously strident NGO and G77 critics were largely reduced to talking about how these systems should be structured, rather than whether they should be employed.

The chief issues now appear to be: What is the design of these systems—voluntary or mandatory, which sources are included, are credits allocated or auctioned, baselines, banking, relation to permits and taxes, external tradability of credits, and compliance and enforcement mechanisms. As shown in Schneider and Wagner (2002b), these are critical and difficult issues, and are not easily resolvable, especially when independent jurisdictional entities must agree, particularly when the inevitable equity issues surface. Recalling the difficult and lengthy legislative birth of the US SO₂ utility trading scheme, to the extent that these issues—especially baselines and allocation methods—are left for administrative body determination, one can expect that many years, not months, will be consumed in their completion.

The EU is launching a number of trading experiments that, in the absence of US participation, will largely define the success or failure of future Treaty trading proposals. It appears that if Europe does not come together in implementing a single successful system, trading under the Kyoto Protocol may be regarded as a failure. While cognizant of the need for flexibility and allowing market-based mechanisms to prevail, early versions do not look especially elegant or easy to use, and integration of the different models may be difficult in 2008. A recent Pew Center sponsored study on emissions trading points out the importance of integration. An earlier theoretical study by Hahn and Stavins (1999) also pointed to problems of incompatibility.

For the Kyoto Protocol project-based mechanisms, the largest problem is the looming complexity and expense introduced by the COP and the Executive and Supervisory bodies that will set credit requirements and approve specific projects. Baseline and verification requirements may sink JI and CDM if standardization requirements are not adopted. Another large issue is whether substantial energy projects—dams, natural gas pipelines and gas-fired

generation—will qualify for credits, or will be excluded on sustainability or other policy grounds. There are also significant possible problems with corruption (and politically forced inefficiencies)—and consequent lack of integrity--in the JI and CDM systems.

The UK voluntary incentive-based auction system could serve as a rough model for a Bush administration proposal for a US CO₂ voluntary reduction scheme, although current US budget issues may prevent consideration of such a system if it required substantial outlays. The current Bush proposal does make some progress toward setting the groundwork for an emissions trading based reduction scheme. It upgrades (though still makes voluntary) emissions reporting and promises entities making early reduction and efficiency efforts that they will not be penalized in the event mandatory reduction requirements are adopted at a later time. Several (largely minority-sponsored) US Senate legislative proposals have adopted a four pollutant emissions cap and trading approach which includes CO₂ as a target pollutant, while the Administration proposal adopts trading but deletes CO₂. CO₂ limitations are supported by a least one US utility coalition and are beginning to be adopted by States (and even by the City of Chicago; see also the report on the development of the Chicago Climate Exchange in Schneider and Wagner (2002a)). However, absent a major climate catastrophe (perhaps, say, the inundation of Florida or New Jersey cites and beaches) or a currently unimagined political shift the US legislative process will probably not move forward with mandatory climate change legislation for some time.

III.B.Sinks

While the initial Kyoto proposals contemplated granting Annex 1 nations emission credits only for the net change in emissions from 1990 until the first compliance period, the Treaty as now written defines maximum nation-by-nation gross credits applicable to forestry and land use activities which reduce carbon. Consequently, the G77 nations constantly insist upon tight limits on the definition of the credits and the percentage of sinks credits which can be used to satisfy a nation's assigned amount or which can be transferred elsewhere.

As mentioned above, Marrakech continued that trend, with the creation of a new non-bankable, restricted use sinks credit unit—the RMU. Annex 1 nations may only use these units to satisfy up to 1% of their 1990 emissions. On the other hand, in order to attract Russia into the ratification fold, COP-7 virtually doubled Russia's sinks credits from 17 to 33 million

tons. The specific rules for counting and using sinks are scheduled to be defined in 2003 at COP-9.

III.C. Compliance

Compliance issues are probably the most difficult matters remaining for final determination, and they will now not be finally resolved, at the earliest, until the first meeting of the parties after the Treaty enters into force. Umbrella Group members, especially Japan, are understandably very nervous about making a firm commitment to meet Kyoto targets if sanctions are stiff and automatically applied. By putting off the decision on enforceability, the COP may have intentionally set up an opportunity for a “second look” through another ratification round: if the enforceability provision is regarded as an amendment, it can be added only upon a $\frac{3}{4}$ vote, followed by ratification by each nation.

COP-7 was not completely disappointing in that area; some compliance matters were indeed made clear at Marrakech. Enforcement will be carried out through two bodies—a facilitative and an enforcement branch. Both bodies will have Annex 1 and non-Annex 1 membership, and decisions will require double $\frac{3}{4}$ majorities. Some penalties have been defined: failure to meet the mechanisms’ eligibility criteria will require suspension from participation in the mechanisms; failure to meet emission reduction obligations (assigned amounts) will require paying back 1.3 times the deficit in the next period. A party can raise compliance issues against any other party; nations can ask that compliance proceedings be kept confidential until a final decision is reached, but interim confidentiality is up to the deciding authority. This is a major environmental NGO issue, since they believe – possibly with good reason - that without “transparency,” compliance decisions, and hence the entire Kyoto scheme, will lack integrity.

IV. PERSPECTIVES

IV.A. What will the US do?

From the European Union perspective, it is important to plan on different contingencies of US strategy. While the September 11th and Middle East events have given the US

considerable license to lie low since before COP-7, the sense is that the state of play may well change if the KP is ratified, terrorism concerns diminish and the world economy rebounds. Pressure may therefore mount on the US to come to the table with, at very least, a modified proposal that is more compatible with the KP, promising significant reductions of CO₂. The EU has both a moral claim, based in part on its support for the terrorism coalition, and potential trade weapons, to induce the US to act. In addition, US leverage to modify KP obligations will certainly decline as ratification numbers mount.

The linkage between Kyoto, and the WSSD and other Rio-based international agreements (desertification and biodiversity) was worrisome to the US delegation; they feared that if a Marrakech Declaration were issued expressing a joint commitment to the entire assemblage of treaty subjects, it could lead to strong demands by the developing world for additional economic assistance and changes, for example, in energy and resource extraction and use. The Marrakech statement that emerged, while it mentioned the linkage between the Protocol and the other WSSD subjects, was relatively vague and toothless. However, the relationship of Kyoto to international development aid commitments looms as a major future topic which the WSSD preliminaries and other international gatherings have begun to address.

Again, the relationship of the Kyoto Protocol to the WTO, and international trade remains open, and could become very important for multinational business, especially for firms based in the US. The recently concluded Qatar WTO agreements reinforce the notion that trade barriers may be erected for legitimate environmental reasons. If the Kyoto Protocol enters into force, there will be substantial pressure, emanating from the EU and probably Umbrella Group nations, to erect trade barriers against US source goods and services to equalize energy cost differentials. The attempt to penalize US entities for the US withdrawal might go farther than that. For example, EU competition policy could attempt to place restrictions on US firms' investments and acquisitions. How far this discrimination could go without offending international law or treaties and violating political norms is unclear, but US-based firms exporting energy-intensive goods and services are clearly at most risk

IV.B.Fulfillment of obligations

One weakness of the Kyoto Protocol is that it only has one significant commitment period and has little long-term perspectives.

Concerning the 1st commitment period, several key Annex 1 nations (the EU--especially Spain, Portugal, and Ireland--Canada and Japan) in addition to the US have concluded that it will be difficult to reach the Protocol targets in that period because of economic growth and increased energy use in the transportation, commercial and consumer sectors. They are therefore counting on the purchase of external credits, which must be accredited by Treaty organs if used to satisfy Protocol obligations. With the US out of the market, prices for carbon credits will be lower than if the largest purchaser were competing, and several nations have already begun to commit to significant credit purchases (Netherlands, Japan).

While some nations pressed to open early discussions of 2nd commitment period obligations, including developing nation commitments, serious discussions on the subject will clearly be deferred until after the Treaty enters into force (the Protocol calls for starting discussion by 2005). This is a very divisive issue, and developing nation commitments are unlikely to be made without a much larger concrete promise of economic aid and technological assistance flowing from north to south.

IV.C.Final observations

Marrakech could easily have derailed the Kyoto train. It did not. That it did not is attributable to the enthusiasm of the EU and G77 groups (and environmental NGOs) for keeping the ratification process alive despite necessary softening provisions needed to keep the Umbrella members in the fold. Whether the compromises, especially on sinks and compliance, went too far to maintain the fundamental integrity of the Treaty is yet to be seen. The consequences of an initially unenforceable Treaty in force would be significant, probably leading to further rounds of negotiations, approvals, and ratifications. However, if one views the Kyoto process as a long term endeavor, not unlike the emergence of the WTO, there is room for considerable optimism, since the international community has continued the hard work of fashioning an agreed global mechanism for protection of the climate in the face of considerable resistance. In that view, whether the initial experiment has weaknesses in its structure is much less important than whether the process continues forward movement--and whether the structure will accommodate change to adapt to the needs of the world's climate as the dimensions of the problem become clearer.

V. REFERENCES

For detailed references on emission permit trading in the international context, we refer to Schneider and Wagner (2002b).

Hahn, Robert W. and Stavins, Robert N. "What has Kyoto Wrought? The Real Architecture of International Tradeable Permit Markets," Cambridge, MA: Harvard University, 1999.

Schneider, Friedrich and Wagner, Alexander F. "Current issues in emission trading and global climate change policy," Linz and Cambridge, MA: University of Linz and Harvard University, 2002a.

Schneider, Friedrich and Wagner, Alexander F. "Permit Trading and Climate Change Policy," Linz and Cambridge, MA: University of Linz and Harvard University, 2002b.