

'Demonstrable progress' on climate change: prospects and possibilities

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It is well known that developing a verification regime is as much a political exercise as it is a technical one. This has been evident in the negotiations on 'demonstrable progress' under the 1997 Kyoto Protocol to the 1992 United Nations Framework Convention on Climate Change (UNFCCC).¹ The concept emerged in response to broken promises, particularly the failure of the UNFCCC itself to achieve its goal of 'returning global greenhouse gas emissions to 1990 levels' by 2000.² Immediately after the convention was adopted, it became clear that emissions in most developed countries were far from stabilising; in fact, they were rising rapidly.³ As a result, the Intergovernmental Panel on Climate Change (IPCC) called for even tougher action to reduce emissions levels. Thus began negotiation of the Kyoto Protocol.⁴ The eventual deal committed developed countries to an overall emissions reduction level of 5.2 percent below 1990 levels by 2008–12 for a 'basket' of six greenhouse gases (GHGs).⁵ This total was divided into individual, unequal targets for each Annex 1 (developed)⁶ country in accordance with the principle of 'common but differentiated responsibilities and respective capabilities',⁷ which is enshrined in the convention.

This principle is fundamental to the climate change negotiations. First, it acknowledges the historic role that industrialised countries have played in creating the climate change problem and it places the greatest burden on them to rectify it. Second, it takes into account the financial gap between rich and poor nations and recognises that global efforts to reduce GHG emissions should not be at the expense of development in the Third World. Taken together, there is an expectation—certainly among poorer countries—that the rich, industrialised world should take the lead in the global battle to mitigate and adapt to the effects of climate change. While, in theory, developed countries accept this role, so far, they have collectively

failed to live up to their declarations. Not meeting their emissions reduction commitments under the UNFCCC is one thing, but it is also questionable whether they are fulfilling their other obligations to provide financial support and technology transfers to developing states to help them adjust to climate change.⁸

When negotiations on the Kyoto Protocol started at the First Conference of the Parties (COP1) to the UNFCCC in Berlin, Germany, in March 1995, participants were talking about a five-year compliance (or commitment) period, beginning in 2008, 13 years in the future. Due to the periodicity of reporting,⁹ a final assessment of compliance would only be available in 2015, 20 years hence. Given the atmosphere of mistrust that had emerged, developing countries were concerned that this was another attempt by developed nations to shirk their responsibilities and to delay taking action. This prompted them to push for an interim measure of progress to gauge whether developed countries were on course to meet their emissions reduction obligations. This concept was finally adopted in Article 3 of the accord, which states that ‘each party included in Annex 1 (developed) shall by 2005 have made demonstrable progress in achieving its commitments under this Protocol’.¹⁰ What is notable is the strength of this commitment. The use of the word ‘shall’ gives the article teeth, although, as will be seen below, lack of an implementation mechanism is likely to prove problematic.

The role of demonstrable progress

The *Verification Yearbook 2002*¹¹ provides a complete description of the protocol’s verification provisions, setting this chapter in context. Demonstrable progress serves a number of important roles within this verification regime—as well as reassuring developing countries that industrialised nations are finally committed to taking action in the medium term. First, as a means of assessing progress in 2005, it will serve as an ‘early warning system’ for states not acting quickly or radically enough to meet their emissions reduction commitments in 2008–12. It will allow time for each country to introduce additional domestic measures and to take advantage of the protocol’s so-called flexible mechanisms: international emissions trading (IET); joint implementation (JI); and the clean development mechanism (CDM).

International emissions trading will allow parties to buy carbon allowances to offset their own emissions from those countries that have exceeded their commit-

ments by making further reductions. Under the JI mechanism, states can earn extra allowances by implementing emissions reduction projects in other Annex I states. Alternatively, the CDM permits nations to claim allowances for projects that they have established in developing countries. The combined use of the flexible mechanisms must be 'supplemental to domestic action',¹² limiting the extent to which parties can use them to meet any shortfall in relation to their own emissions reduction obligations under the protocol.

Second, demonstrable progress will help to build trust between Annex I parties, reassuring them, even prior to the start of the commitment period, that there are no 'free riders' and that the burdens of the protocol are being shared equitably. This takes on particular significance in view of the economic implications of implementation. Even though it is unlikely to amount to a significant proportion of a country's gross domestic product (GDP),¹³ the implementation of measures to achieve domestic emissions reductions will not be without cost. Each state needs to feel confident that it is not putting itself at a disadvantage in the global market by meeting its obligations while others are not.

Finally, the process will benefit all parties by providing a forum in which exchange information and to establish 'best practice'. Each country will need to examine its position and develop an integrated set of policies and approaches to satisfy its treaty commitments. By sharing methodologies and lessons, more advanced countries can impart the benefits of their experience to less advanced ones, thereby raising the general standard of implementation. Demonstrable progress will also give parties an opportunity to test their national systems and legislation, which will be mandatory once the first commitment period begins in 2008. The protocol is unique among multilateral environmental agreements and contains many innovative and untested elements, particularly in relation to its verification regime. A period of 'learning by doing' will be important for ironing out unforeseen problems and for engendering a co-operative approach to resolving differences in interpretation—before implementation questions are dealt with under formal compliance procedures.

The current status of demonstrable progress

The adoption of the Kyoto Protocol in 1997 in fact marked only the start of more protracted negotiations on the details of implementation. The protocol provided

only a framework, which needed to be 'fleshed out' before key countries would consider ratifying it. Agreement was finally reached at COP7, held in Marrakech, Morocco, from 29 October–10 November 2001. The Marrakech Accords are regarded as a comprehensive rulebook for implementation of the protocol. Agreement was only achieved, however, after the US withdrew from the talks in October 2000, claiming that it could not ratify a treaty that excluded the mounting emissions of the developing world. This was a major blow to the international climate change regime, given that, in 1998, the US emitted 5.8 billion tonnes of carbon dioxide equivalent into the atmosphere, almost 40 percent of the emissions of the industrialised world.¹⁴ Worse still, the US emits 21.1 tonnes of carbon dioxide equivalent per head of population, compared to the European average of 10.3 tonnes and 1.1 tonnes in India.¹⁵ In contrast to the European Union (EU), US emissions are still rising sharply. Clearly, without the US being a party to the protocol, only half of the climate change problem is being addressed. But, as many leaders have pointed out, it is currently the 'only game in town'.¹⁶ There are hopes that the US can be persuaded to return to the negotiations in a future commitment period.

Following agreement on the Marrakech Accords, a series of key ratifications occurred, including that of the EU in August 2002. To enter into force, though, the protocol needs to be ratified by 55 parties to the UNFCCC, including those Annex I countries that, collectively, were responsible for producing at least 55 percent of total Annex I country emissions in 1990. As of mid-November 2003, 119 parties had submitted their instruments of ratification, including 32 Annex I states that, together, accounted for 44.2 percent of the emissions of industrialised nations in 1990. The world is now waiting on Russia—which was responsible for 17.5 percent of the emissions of Annex I countries in 1990—to finalise its domestic processes for ratification. Russia alone could trigger entry into force of the protocol. President Vladimir Putin announced in April 2002 that Russia was preparing to ratify the treaty, but there have since been conflicting statements from other ministers and officials. Latest reports suggest that Russia has completed its domestic processes for ratification,¹⁷ although this could be yet another smokescreen. After eight long years of negotiation, the delay to ratification is extremely frustrating.

And it is bad news, too, for demonstrable progress. With uncertainly still clouding the matter of implementation, it is difficult, politically, to remind parties of their

promise to achieve demonstrable progress in less than two years. First, it is not a binding obligation until the accord enters into force. Second, it is likely to make an already jittery country like Russia have second thoughts about its ability to meet its obligations and hence to delay further its ratification. Yet, in order to have the time to gather and collate the information necessary to demonstrate progress—assuming that there has been some—countries need to start now. Since the Kyoto text was adopted, the Umbrella Group¹⁸ has largely undermined the original concept of demonstrable progress, decoupling it entirely from the assessment of compliance. Developing countries have endeavoured to make it a more rigorous exercise, censuring those states that have not made satisfactory progress towards meeting their targets. However, they lacked the negotiating power to challenge the Umbrella Group, whose members were able to use their future ratifications as leverage.

For this reason, Article 7 of the Marrakech Accords only 'urges each party to submit a report by 1 January 2006 for the purpose of reviewing demonstrable progress'.¹⁹ The non-mandatory nature of this submission is likely to render it not very meaningful. Despite being enshrined in the treaty, demonstrable progress has, over time, become so watered-down as to be in serious jeopardy of not meeting its original objectives and of becoming a mere paper exercise. This spells danger for the climate change regime, particularly at a moment when its future is in the balance.

The remainder of this chapter looks at the guidance offered to parties preparing their reports on demonstrable progress and the process for evaluating these submissions. And it discusses the roles that different stakeholders can play to resurrect this important provision and to make it a meaningful exercise that could underpin the future success of the climate change regime.

The report on demonstrable progress

The Article 7 decision of the Marrakech Accords determines that the following information should be in each country's report on demonstrable progress.

- (a) Policies and measures (PAMS) that have been implemented and the legal or institutional steps that have been taken to meet emissions reduction targets.
- (b) Trends in, and projections of, GHG emissions.
- (c) Details on how those PAMS that have been implemented will contribute to meeting emissions reduction commitments.

- (d) Activities and programmes undertaken to promote technology transfers to, and capacity building in, developing countries.

However, the accords offer no guidance to help parties prepare such reports. With this in mind, COP7 requested that the Subsidiary Body for Scientific and Technological Advice (SBSTA) consider how the information should be 'presented and evaluated'. Having a common structure for the reports will facilitate comparative analysis.

The guidance was eventually agreed at COP8, which took place in New Delhi, India, from 23 October–1 November 2002. It will be formally adopted at the First Meeting of the Parties (MOP), which will be held in conjunction with the first COP after the protocol enters into force.²⁰ It requires that parties prepare their report on demonstrable progress 'as a single document including four chapters',²¹ containing the information listed above. The information should be consistent with the party's fourth national communication, which is due, according to the UNFCCC, between November 2004 and November 2006, in accordance with a COP decision.²² Given that the signatories to the convention and its protocol are not identical—most notably, the US is a party to the UNFCCC but refuses to sign the protocol—and that, under the protocol, parties have assumed additional obligations, it makes sense that these reports are prepared and submitted separately. Yet, since both reports require much of the same information, it seems sensible that, in preparing them, parties follow the format and guidelines for the preparation of national communications.²³ Where this guidance is insufficient for reporting on protocol issues, parties are directed to use the guidance developed under Article 7 of the protocol.²⁴ This will be necessary when reporting on:

- legal and institutional activities related to the protocol;
- the enhancement of sinks activities;
- actions relating to the flexible mechanisms; and
- financial resources and technology transfers.

The UNFCCC reporting guidelines were last revised as a whole²⁵ at COP5, held in Bonn, Germany, in October 1999, and are divided into two distinct parts. The first part relates to the preparation of annual inventories, including a set of tables—

the common reporting format. The second part concerns all other obligations under the convention. It is the latter that contains information relevant to the preparation of most of the reports on demonstrable progress.

Policies and measures

Under item (a) above, parties are required to report on the policies that they have introduced and the measures that they have taken to limit or reduce their GHG emissions. They are expected to include the same information in their national communications. This makes it likely that they will compile both reports along the lines set out in the UNFCCC guidelines.

In accordance with these guidelines, parties are not required to list every PAM, since they are likely to be numerous. Instead, they 'should give priority to [reporting on] policies and measures, or combinations of policies and measures, which have the most significant impact in affecting GHG emissions and removals and may also indicate those which are innovative and/or effectively replicable by other Parties'.²⁶ This clause balances the need for the report to provide evidence of real or projected emissions reductions, and its role in exchanging information between parties and laying the foundation for best practice.

Furthermore, the guidelines state that the reduction of GHGs need not necessarily be the 'primary objective' of the selected PAMS, and that the report can include initiatives that 'are planned, adopted and/or implemented by governments at the national, state, provincial, regional and local level'.²⁷ Parties are asked to include descriptions of their selected Policies and Measures and to summarise them in separate tables for each sector, employing the common format,²⁸ with columns on the following:

- affected greenhouse gas or gases;
- kind of instrument (economic, fiscal, voluntary/negotiated agreement, regulatory, information, education, research or other);
- status of implementation (planned, adopted or operational);
- the implementing entity;
- impact of the policy, or collection of policies, including a quantitative estimate of emissions reductions by year;
- cost of implementation;

- non-GHG mitigation benefits (on health or emissions reductions of other pollutants, for example); and
- interaction of the policy with others at the national level.

There are difficulties associated with assessing the potential effects of PAMS or with evaluating their effect during and after implementation. The success or failure of a policy is inherently subjective and can depend on a wide range of factors. Attempts to model the impact of a policy must rely on a number of assumptions, including anticipating the behaviour of populations, the interaction of the policy with other instruments, and trends in domestic and world markets. For this reason, predictions are peppered with uncertainty. Further complications arise if parties employ different models and underlying assumptions to make predictions for their basket of PAMS. Since COP4, held in Buenos Aires, Argentina, in November 1998, parties have discussed 'good practices' in regard to PAMS. At COP7, such discussion resulted in the adoption of a decision that mandated the SBSTA to establish a work programme designed to improve the transparency, effectiveness and comparability of PAMS. It also requested that further options for co-operation be identified in order to enhance the individual and combined effectiveness of PAMS.²⁹ This work should support parties as they prepare their reports on demonstrable progress.

In addition to the description of PAMS, parties are asked to supply information in their report on demonstrable progress on legal or institutional steps that have been taken to implement the protocol. This should include domestic mechanisms for adopting an integrated climate change strategy. Part of this will be the mandatory establishment, under Article 5.1 of the protocol, of a 'national system for the estimation of anthropogenic emissions by sources and removals by sinks of all greenhouse gases'.³⁰ Where a country plans to take advantage of the flexible mechanisms, it will also need to establish a national registry for tracking and accounting for its assigned amount.³¹ This data clearly will be in addition to that provided in the national communication. Parties will have to refer, therefore, to the Article 7 reporting guidelines.

National system

A national system comprises all of the 'institutional, legal and procedural arrangements' for preparing an inventory. The reporting guidance is designed to demonstrate

that parties have followed the framework for the establishment of national systems developed under Article 5.1.³² By 2005, parties should be making significant progress towards setting up a national system, which should include appointing a single responsible entity and ensuring that it has sufficient capacity to meet its obligations under the protocol. The system will be subject to an in-depth evaluation during a party's pre-commitment review in 2007, making the report on demonstrable progress a good opportunity to take stock and to remedy any unfulfilled aspects. This will also be a chance to test the functionality of the system, as emissions data will form the basis of much of the information in the report.

The Article 7 guidelines require that each party describe its national system, outlining the processes that guarantee the reporting of 'consistent, transparent, comparable, accurate and complete'³³ information. It should include the following elements:

- the name and contact details of the national entity;
- the roles and responsibilities of other agencies involved in the preparation of the inventory—as well as the institutional, legal and procedural arrangements to formalise them;
- a description of the processes for collecting activity data and emissions factors, identifying key emission sources, and recalculating previously submitted inventory estimates where new data or methodologies have become available;
- a description of the procedures for ensuring the quality of the inventory and the mechanisms for reviewing these over time; and
- a description of the approval and sign-off procedures for the inventory before submission to the UNFCCC Secretariat.

Since the report on demonstrable progress is due two years before the national system has to be finalised, it seems sensible that parties report on the status of these elements under the same categories. They should also make clear what efforts are being made to implement unfulfilled elements of, and improvements to, their system.

National registries

As with national systems, parties will need to describe the progress that they have made in establishing a national registry. This will act like a bank, with accounts for holding, retiring and cancelling tradeable emissions allowances, or 'units',³⁴ under the flexible mechanisms. The Marrakech Accords stipulate that the registry

should take the form of a 'standardised electronic database'. Work continues under the auspices of the SBSTA to develop the technical standards necessary to ensure the 'accurate, transparent and efficient exchange of data' between them.

Due to late-night brinkmanship at COP7 over the rules for the flexible mechanisms and accounting for assigned amounts, there was no time to finalise the Article 7 reporting guidelines for national registries. Instead, these were forwarded to COP8 for elaboration. The resulting guidance sets out the information that parties should report annually in their registries. Again, with the report on demonstrable progress due prior to the deadline for establishing a registry, parties should provide a status report on their efforts to satisfy registry requirements. Obviously, it will not be possible at that stage to provide details of unit serial numbers or lists of transactions, as will be required later. At a minimum, though, parties should be able to name a responsible entity, outline an implementation plan and provide details of how they expect to meet the technical standards essential for the system's effective operation.

Emission trends and projections

In order to demonstrate (c) above, parties are required to establish a baseline trend for domestic GHG emissions and to calculate projections based on various domestic policy scenarios. In particular, this exercise is designed to evaluate the effect of the PAMS outlined in (a), as well as to explore how additional measures could generate alternative future emissions paths. Information of this nature is also required in national communications. Under the protocol, however, there are other ways in which a party can meet its emissions reduction target, including through the flexible mechanisms and the enhancement of natural sinks. Nevertheless, the UNFCCC reporting guidelines provide extensive instructions on how this data should be presented. What they do not do, though, is provide instruction on the use or development of projection methods.

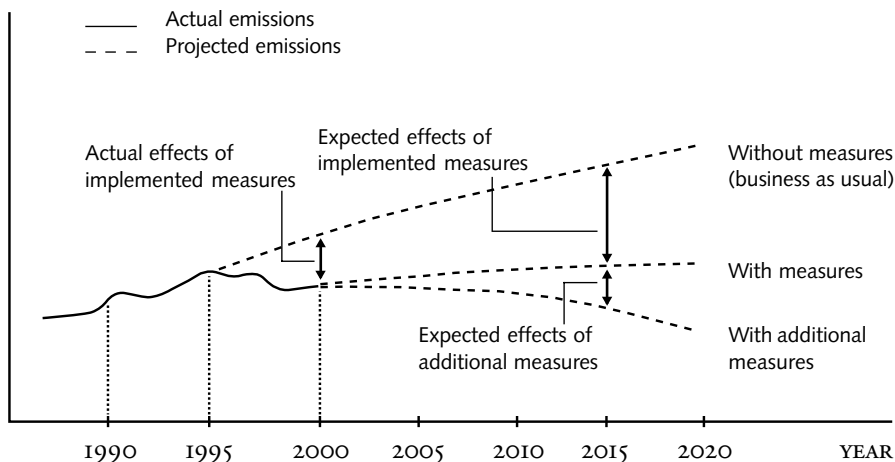
UNFCCC guidance requires that parties, as a minimum, make a projection of their 'with measures' emissions until 2020, as compared with their actual emissions recorded in national inventories since 1990. Parties are also encouraged to make projections of emissions 'without measures' (business as usual) and 'with additional measures'.³⁵ This process should be undertaken for each gas and provided in an aggregated format for each sector. The results are to be presented in graphical form (see figure 1). On the basis of the projections, the party should offer predictions

of emissions levels for each sector and for each gas in 2005, 2010, 2015 and 2020. Finally, parties should include total estimates of 'emissions avoided or sequestered' for each five-year period between 1990 and 2020—either by taking the difference between the 'with measures' and 'without measures' projections or by combining the results and predicted results of each PAM.

Given how dependent projections are on the methodology used to calculate them, significant emphasis is placed in the guidance on explaining the methods and the assumptions underlying the projections and the uncertainties associated with the approach that is employed. This is essential to making sure that reporting is transparent and that enough information has been provided to permit substantive and comparative judgements to be made on the methods used and the assumptions made.

By aggregating the information gathered and collated for sections (a) and (b) of the report on demonstrable progress, parties will be in a position to examine the impact of their climate change programmes. Under (c), parties are required to carry out an assessment of the contribution that domestic policies and measures will make in meeting their obligations under the protocol. By implication, they should provide an explanation of how any deficit will be made up through alternative means.

Figure 1 Graphical representation of a party's actual and projected emissions for one sector or gas



Financial resources and technology transfers

Under Articles 10 and 11 of the Kyoto Protocol, Annex I parties are required to help poorer nations adapt to and mitigate climate change through the provision of financial resources and technology transfers. They are obligated to report on them in their reports on demonstrable progress. However, they are already required to promote financial and technology transfers to developing countries under Article 4 of the UNFCCC and to report on these efforts in their national communications. One way of meeting the requirements of these articles is by contributing to the Global Environment Facility—the official financial mechanism for the UNFCCC and other United Nations (UN) environmental agreements—which was set up by the UN in 1991. Under the protocol, though, three new funds have been established. The Least Developed Countries Fund has been set up to help identify priority action that is required in the poorest UN member states. The Special Climate Change Fund will assist a wider group of developing countries with implementing adaptation and mitigation measures. Finally, the Kyoto Protocol Adaptation Fund, financed through a levy on the CDM, is designed to support specific adaptation projects and programmes in developing countries that are also parties to the protocol.

UNFCCC guidance on reporting on these financing efforts can easily be extended to cover additional funds and mechanisms under the protocol. Parties are asked to complete a table showing the resources that they have provided to various funds and institutions each year to promote climate change activities and programmes in developing countries. The three Kyoto funds should be added to this. The guidelines state that parties should only include in the table ‘new and additional’ financial resources and should clarify how this status has been determined in order to avoid double counting. Further tables are provided for reporting information on resources imparted through bilateral, regional and other multilateral channels. This may be particularly relevant to EU members, for example.

A similar approach is pursued in relation to reporting on technology transfers. A pro forma is provided in the UNFCCC national communications reporting guidelines for countries to supply information on projects or programmes that facilitate or finance the transfer of environmentally sound technologies. This includes a description of the activity, an evaluation of its success rate, and an estimation of its impact on GHG emissions.

Evaluation of reports

Parties agreed at COP8 that reports on demonstrable progress would be 'evaluated along with the national communication submitted after entry into force of the Kyoto Protocol'. For most Annex I parties this will be their fourth national communication. An expert review team (ERT) will be assigned to appraise each party's submission, including via an in-country visit. The ERT's assessment of the report on demonstrable progress will be included in its review report. In addition, the UNFCCC Secretariat has been asked to prepare a synthesis document containing information from all parties' submissions. The Subsidiary Body on Implementation (SBI) will consider this document in making recommendations to the COP/MOP.

While this process could provide a meaningful assessment of parties' efforts to meet their obligations under the treaty, it is unlikely to do so. Unless there is a renaissance in relation to political support for demonstrable progress, only developing countries and environmental non-governmental organisations (NGOs) will press for it to be awarded a high profile in 2006. Concerns about censure, the failure of key countries to tackle rising emissions levels, and lack of capacity in states with economies in transition³⁶ provide some explanation for this. It is unlikely that any country will be willing to criticise another in a public forum when its own report is also being scrutinised. This is already the case with national communications under the UNFCCC. Consequently, should proponents of demonstrable progress accept that they have lost the battle? Perhaps not quite yet, although the situation is not very promising.

The role of parties

By not pushing for each country to be individually held to account, and by promoting the 'softer' objectives of information exchange and confidence building, it may be possible to re-engage parties more effectively. Parties should be able to use the process as a way of taking stock of their institutional, legislative and programmatic measures for implementing effective climate change policies. The reporting exercise can help to push climate change up the national and international political agenda and to stimulate the provision of new resources, nationally and internationally.

The chance to 'test' systems and policies and to practice using the reporting guidelines should not be underestimated. While many countries already report in accordance with the convention's requirements, there are many that have yet

to submit national communications or annual reports. This is particularly true of states with economies in transition. Even in situations where annual reports have been filed, they are often incomplete, lack transparency, or are not in the common reporting format (adopted at COP5).³⁷ This is often due to countries not having the methodological, institutional and financial capacities to meet their obligations. In Portugal, for example, only two members of staff are dedicated to the preparation of an inventory covering seven sectors, ranging from the supply of energy to agricultural processes.

Given this lack of capacity, work should be conducted to simplify the reporting process as far as possible and to make available the tools for assessing the impact of PAMS and for making emissions projections. The fact that parties need to seek appropriate guidance from at least two separate sources, neither of which has been specifically created for the purpose of reporting on demonstrable progress, leaves them uncertain. A consistent, transparent and comparable set of submissions would make evaluation easier. Some of the necessary methodological work could be carried out under the SBSTA programme on 'good practices' in regard to policies and measures, while the Secretariat or an independent organisation would be best placed to produce a guide for parties on the preparation of reports on demonstrable progress. This document could consolidate the guidance that parties are required to follow, taking them through the process step-by-step, emphasising openness and good reporting practice.

The role of the Secretariat

The UNFCCC Secretariat is tasked with providing substantive support to parties in meeting their reporting obligations under the convention and the protocol. It is also responsible for co-ordinating and supporting the work of the ERTs. It has experienced and knowledgeable members of staff who are able to advise parties on the preparation of their reports and promote the exchange of information and the development of best practice. There is, however, a feeling in some corners of the Secretariat that demonstrable progress is a 'hot potato' due to the subjective nature of much of the data that is likely to be in the reports and because of the political concerns of parties about their reports being used to judge them. Yet, it is important that the Secretariat not let demonstrable progress be swept under the carpet or shy away from the practical and political problems that will be associated with it.

Given that demonstrable progress is mandatory, the Secretariat should more actively encourage early action by parties. The resources available to parties engaged in other reporting tasks under the protocol should also be accessible to those preparing reports on demonstrable progress. One idea is to find a country that is willing to fund workshops to assist parties in submitting their reports. More advanced nations could share the benefits of their experiences with those encountering problems.

In any event, as noted above, the COP has mandated the Secretariat to compile a synthesis report of parties' submissions in 2006. While it will not name names, it can still provide valuable information on collective progress towards meeting Kyoto targets. First, it can provide a communal assessment of global emissions between 1990 and 2005 and attempt to issue a forecast of emissions levels at the end of the first commitment period in 2012. Second, it can analyse the effectiveness of the PAMS being undertaken by parties and evaluate whether the methodologies employed to calculate emissions projections are valid. Some judgement should also be made on whether additional measures are required to meet Kyoto targets. This type of analysis will provide credible information on which the SBI can make recommendations to the COP.

The role of NGOs

A high standard of reporting by parties will also facilitate the involvement of other groups in the evaluation process. NGOs have traditionally played a significant role in monitoring the implementation of environmental treaties by states parties.³⁸ In the absence of a rigorous process to review and verify submissions on demonstrable progress, NGOs should look to fill the gap and to conduct their own independent analysis. This could form the basis of lobbying campaigns to exert pressure on non-compliant countries and could be used to influence the evolution of the climate change regime. It is not coincidental that negotiations on targets for a second commitment period are due to begin in 2005. Parties anticipated that their reports on demonstrable progress would inform the adoption of new targets for the period between 2012 and 2017.

Political implications of demonstrable progress

The implications of demonstrable progress extend beyond a simple judgement on whether Annex I parties will meet their Kyoto targets. The future of the protocol

is likely to depend on whether they can show that they are providing a lead in combating climate change. Initial discussions at COP8 indicated significant differences of opinion between developed and developing countries on the shape of future commitments.³⁹ The industrialised nations believe that the richer developing states should join them in adopting some form⁴⁰ of target to avoid run-away increases in emissions due to the rapid growth of their economies. They also expect a rising number of developing countries to take on other commitments, such as regular reporting. Developing states, represented by the Group of 77 (G77) and China, are strongly resisting these pressures, arguing that Annex 1 nations have yet to demonstrate real emissions reductions in proportion to their historical responsibility for climate change. This is likely to result in a major impasse in the negotiations before too long.

Demonstrable progress would be one way of highlighting, in a verifiable manner, the actions of Annex 1 parties and setting them on an emissions path that would reassure G77 members. However, it will be hard to satisfy the group as a whole, given substantial differences in regard to the national interests of its members. Clearly, the larger economies of China and India should take on burdens much earlier than the Pacific island states. But this makes it even more important to build trust between developed and developing countries. Without this, the poorest nations will continue to negotiate as part of the G77, rather than forming alliances with other negotiating bodies that might better serve their interests. Instead of seeking to achieve their goal of bringing key non-Annex 1 parties into the regime through diplomacy alone, Annex 1 countries should take note of the adage that 'actions speak louder than words'. Meeting their targets and fulfilling their financial obligations is the surest way of bringing other nations onboard. That is what demonstrable progress is all about.

Undoubtedly, the problem of the US is uppermost in the minds of parties as they negotiate the future of the climate change regime. If the US remains outside the protocol there will be no binding limits on its emissions, a lacuna that substantially undermines the effectiveness of the instrument. While it is admirable that other countries have opted to proceed without the US, it is, nevertheless, important that efforts continue to integrate it into the process as soon as practicable. Demonstrable progress could help to achieve this objective in two ways. First, the

administration of US President George W. Bush is likely to draw confidence from the results of the reporting exercise, seeing that other countries have been able to implement PAMS without imposing economic disadvantages on their commercial sectors. Furthermore, the submission and evaluation of parties' reports could demonstrate that the protocol's mechanisms are functioning and are able to prevent rogue nations from 'free riding'.

Second, an interim assessment of progress will allow for a comparison to be made with the climate change activities being carried out at the state level in the US. Despite the attitude of the Bush administration, many states are implementing tough policies to reduce emissions. One of the more progressive states is California: given its extensive coastline, climate change is accorded a high priority. The state government has undertaken a wide range of measures, from setting efficiency standards for motor vehicles⁴¹ to implementing a registry for reporting industrial emissions inventories.⁴² Enabling comparisons to be made between countries inside the Kyoto framework and those operating outside of it could establish new lines of communication and thus break down the preconceptions of each constituency. Over the longer term, it is to be hoped that all countries can work within the same international regime.

Conclusion

Demonstrable progress has the potential to fulfil a number of roles in the Kyoto process. Yet, the political context in which parties are preparing their reports means that it will be difficult for it to deliver. This will not only amount to a missed opportunity, but it also threatens to undermine seriously what is already a vulnerable treaty. With Russia's ratification still not guaranteed, there is growing concern that the protocol may not enter into force at all. This would be a waste of seven years of complex negotiations. The possibility that designing another legal instrument might take at least as long should motivate everyone involved to bring the protocol into effect as soon as possible. Special emphasis should be placed on the effective operation of the reporting and verification system, which will be the backbone of the treaty, helping to rebuild diminishing confidence between parties and ensuring that the treaty satisfies its aims. This chapter has argued that demonstrable progress is an important element of this verification process.

The bottom line is that climate change is happening and urgent, global solutions are required. Two years before reports are due to be submitted, it is time for all stakeholders involved in the Kyoto process to revisit and reinvigorate the concept of demonstrable progress.

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Endnotes

¹ The text of the UNFCCC is available at <http://unfccc.int/resource/docs/convkp/conveng.pdf>.

² UNFCCC, Article 4.

³ For links to emissions data between 1990 and 2000, see www.climatenetwork.org.

⁴ The text of the Kyoto Protocol can be found at <http://unfccc.int/resource/docs/convkp/kpeng.pdf>.

⁵ The Kyoto Protocol regulates the emission of six greenhouse gases: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆). The 'basket' approach sets one emissions reduction target for all six gases. The last five gases in the list can be converted into carbon dioxide equivalents using global warming potentials (GWPs), which reflect the capacity of each gas to increase the temperature of the atmosphere. Emissions are measured in metric tonnes of carbon dioxide equivalent (tCO₂-e).

⁶ Annex 1 parties are the 35 industrialised countries (plus the European Community) that are signatories to the UNFCCC: Austria, Belgium, Bulgaria, Canada, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, United Kingdom of Great Britain and Northern Ireland, and the United States. However, a total of 38 countries have accepted emissions reduction targets as inscribed in Annex B to the Kyoto Protocol. Annex 1 countries Belarus and Turkey did not accept the targets, but Croatia, Liechtenstein, Monaco, Slovakia and Slovenia were added to Annex B, bringing the total to 38.

⁷ UNFCCC, Article 3, paragraph 1.

⁸ For background material on the financial mechanisms under the UNFCCC and a second review of parties' implementation of their obligations, see <http://unfccc.int/issues/financemech.html>.

⁹ Information in the annual inventories will be for the current year minus two.

¹⁰ Kyoto Protocol, Article 3, paragraph 2.

¹¹ Molly Anderson, 'Verification under the Kyoto Protocol', in Trevor Findlay and Oliver Meier (eds), *Verification Yearbook 2002*, The Verification Research, Training and Information Centre (VERTIC), London, December 2002, pp. 147–169.

¹² FCCC/CP/2001/13/Add.3, p. 2.

¹³ The IPCC predicts that implementation costs for the Kyoto Protocol will be in the range 0.1–1.1% of GDP using the flexible mechanisms. See www.ipcc.ch/pub/un/syren/spm.pdf, p. 25.

¹⁴ Hal Hurton et al, 'Comprehensive emissions per capita for industrialised countries', September 2001, The Australia Institute, www.tai.org.au.

¹⁵ See United Nations Development Programme (UNDP), *Human Development Report 2003*, chapter 19, www.undp.org/hdr2003.

¹⁶ Quote by Jan Pronk, then Environment Minister of the Netherlands and Chairman of COP6, 19 July 2001. See <http://news.bbc.co.uk/1/hi/sci/tech/1446313.stm>.

¹⁷ Vanessa Houlder and Andrew Jack, 'Hopes grow that Russians will ratify Kyoto pact', *Financial Times*, 10 September 2003, www.financialtimes.co.uk.

¹⁸ The Umbrella Group is a loose alliance of non-EU members of the Organisation for Economic Co-operation and Development (OECD) that negotiates collectively on some issues. Members of the Umbrella Group are Australia, Canada, Japan, New Zealand, Norway, Russian Federation, Ukraine and the US.

¹⁹ Decision 22/CP.7, FCCC/CP/2001/13/Add.3, p. 14.

²⁰ It is expected that the first MOP will be held in parallel with COP10 in 2004, after Russia submits its instrument of ratification.

²¹ Decision -/CP.8, COP8. For an advance, unedited version see http://unfccc.int/cop8/latest/22_sbsta16add1.pdf.

²² Parties are required by the COP to submit regular national communications at intervals of three to five years. Parties were due to submit their third national communication by 30 November 2001. They are

likely to adopt a decision that Annex 1 parties submit their fourth national communication by 1 January 2006, to coincide with the submission of reports on demonstrable progress.

²³ The full title of the guidance is 'UNFCCC guidelines on reporting and review', FCCC/CP/1999/7.

²⁴ This guidance, finalised in sections at COP7 and COP8, will be consolidated and adopted by the first MOP. See decision 22/CP.7, FCCC/CP/2001/13/Add.3, pp. 14–29, and the advance, unedited version of -/CP.8 at http://unfccc.int/cop8/latest/19_sbsta13add1.pdf.

²⁵ Part 1 of the guidelines, relating to the submission of annual inventories, was updated more recently at COP8. This was in order to incorporate changes made necessary by the reporting and review requirements agreed under the Kyoto Protocol.

²⁶ FCCC/CP/1999/7, p. 83, paragraph 14.

²⁷ FCCC/CP/1999/7, p. 83, paragraph 15.

²⁸ FCCC/CP/1999/7, p. 86, table 1.

²⁹ For a summary on progress in 'good practices' regarding PAMS, see <http://unfccc.int/issues/goodpract.html>.

³⁰ Kyoto Protocol, Article 5.1.

³¹ A party's assigned amount (AA) is the volume of carbon dioxide equivalent that it is allowed to emit over the first commitment period (2008–12). This is calculated by combining its emissions during the base year (normally 1990) with its negotiated emissions reduction target (expressed as a percentage) and multiplied by five (the number of years in the commitment period).

³² Decision 20/CP.7, FCCC/CP/2001/13/Add.3, p. 2.

³³ FCCC/CP/2001/13/Add.3, p. 21, paragraph 3(b).

³⁴ Parties will be able to trade four types of units. Assigned amount units (AAUs) are derived from the emissions allowance allocated to each party prior to the commitment period. Emission reduction units (ERUS) and certified emission reduction units (CERS) are awarded in respect of projects under the JI and the CDM respectively. Removal units (RMUS) are issued to parties undertaking sinks activities under Articles 3.3 and 3.4 of the Kyoto Protocol. All units are equal to one tonne of carbon dioxide equivalent.

³⁵ The guidelines define 'with measures' as those PAMS that have been implemented or adopted at the time of reporting. An 'additional measures' projection should also include planned PAMS. A 'without measures' projection should exclude all measures that are planned, adopted or have become operational after the year chosen as the starting point (1990 for most countries). In this way, it provides a 'baseline' or 'reference' projection to compare against actual changes.

³⁶ Nations in the former Soviet bloc that suffered economic downturns following the collapse of communism are referred to as countries with economies in transition. Under the Kyoto Protocol, these states are likely to have an allowance surplus in the first commitment period due to their GHG emissions having declined substantially since the base year because of the reduction in industrial and other activity.

³⁷ FCCC/SBSTA/2001/5 and FCCC/SBSTA/2001/5/Add.1

³⁸ Oliver Meier and Clare Tenner, 'Non-governmental monitoring of international agreements' in Trevor Findlay and Oliver Meier (eds), *Verification Yearbook 2001*, VERTIC, London, December 2001, pp. 207–222.

³⁹ For an advance, unedited version of the Delhi Declaration see http://unfccc.int/cop8/latest/1_cpl6rev1.pdf.

⁴⁰ Kevin Baumert et al (eds), 'Building on the Kyoto Protocol: options for protecting the climate', World Resources Institute, Washington, DC, October 2002.

⁴¹ See 'Governor Davis signs historic global warming bill', press release issued by the Governor of the State of California, 22 July 2002, available at www.governor.ca.gov/state/govsite/gov_homepage.jsp.

⁴² US industry can voluntarily submit emissions inventories, according to standards and guidelines. This provides companies with an incentive to document their GHG emissions, to learn reduction strategies, and to protect early actions prior to introduction of an emissions trading scheme. See 'Governor Davis applauds California climate action registry for nation's first greenhouse gas reporting standards', press release, 26 June 2002, available at www.governor.ca.gov/state/govsite/gov_homepage.jsp.