

# BUILDING A COMPLIANCE REGIME UNDER THE KYOTO PROTOCOL

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The Center for International Environmental Law  
and  
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## EXECUTIVE SUMMARY

With the adoption of the Kyoto Protocol to the Framework Convention on Climate Change, the international response to the threat of global warming entered a new phase. For the first time, developed countries undertook binding commitments to limit their emissions of greenhouse gases. An important part of the work now facing the Parties is to elaborate mechanisms designed to ensure that Parties meet their commitments under the Protocol. Broadly speaking, they must design a compliance regime.

The goal of compliance systems in multilateral environmental agreements is not so much achieving formal compliance as altering environmentally unsustainable behavior. A compliance system in force during and after the first commitment period should best be viewed not as a single concept, but rather as two distinct, complementary ones. During the commitment period, Protocol requirements should give rise primarily to a managerial or facilitative approach, in which the relevant oversight body facilitates Annex I Parties in the implementation of their emission limitation and reduction obligations. After the commitment period ends and the Parties' progress is evaluated, the oversight body will be charged with the enforcement of those obligations.

The facilitative approach adopted during the first commitment period would have several benefits: building confidence in the treaty regime; ensuring that all Parties have the institutional, technical, and financial capacity to fulfill their obligations; reinforcing the Parties' sense of collective action and obligation; demonstrating that obligations are reasonable and attainable; and encouraging greater participation in the regime while lowering resistance to the adoption of additional binding commitments. Consistent with the traffic light approach to the cooperative mechanisms, the facilitation body should have the authority to regulate or suspend a Party's participation in the cooperative mechanisms, when such participation is determined to be endangering a Party's ability to successfully implement its commitment period obligations.

At the end of the commitment period, there will presumably be a short "true-up" period to allow for a final tally of emissions and last minute attempts to reach emissions targets. Parties who need reduction units to meet their targets during the true-up period may be unable to purchase them, because none are available on the open market. Two basic approaches could be used to respond to such a situation. First, Parties could pay into a Clean Development Fund (CDF), which would finance ex post emissions reductions in amounts commensurate with a non-complying Party's overage. Second, Parties that participate in Article 17 emissions trading could create a compliance reserve by making ex ante emissions reductions during the commitment period in excess of their required targets. In addition to the primary objective of making the climate whole, these mechanisms would give Parties a final means of avoiding a formal finding of "non-compliance" with respect to their substantive obligations.

From an environmental perspective, the ex ante reserve approach is preferable since its would be comprised of actual tons reflecting reductions during the commitment period,

whereas the ex post CDF approach merely cures an overage problem by creating additional reductions at a later date. Parties are likely to resist the ex ante reserve approach, however, as it would entail making greater reductions during the commitment period and would not distinguish between Parties that meet their commitments and those who do not. In addition, non-Annex I Parties may prefer the CDF approach given its potential to provide an additional financial resource for adaptation or additional reductions.

Actual non-compliance will not be at issue regarding the Parties' quantified emissions limitation and reduction commitments until the end of the true-up period at the close of the first commitment period because only then will Parties be required to demonstrate that they were within their assigned amounts. However, procedural non-compliance could arise during the commitment period if a Party fails to submit its national reports, annual inventories, or related information to the relevant oversight body. On a conceptual level, the enforcement regime for procedural non-compliance will rely on persuasion, in the form of carrots and sticks, to induce compliance and include the relatively standard set of non-compliance responses. By contrast, substantive non-compliance should engender a strict liability approach of "making the climate whole," by requiring a Party that has exceeded its emission allocation to purchase offsets backed up by real tons of carbon reductions, or to pay into a CDF an amount sufficient to underwrite real future reductions. If the non-complying Party refuses to purchase its way back into compliance, then relatively automatic economic measures such as fines or trade related enforcement measures will be a proper response.

Economic measures will not, however solve the problem of a non-complying Party that is simply unable (as opposed to unwilling) to correct the overage. In these circumstances an appeal of the economic measures will permit a consideration of alternative measures to make the climate whole. Such measures could include a relaxed payment schedule for tapping the CDF or reserves or a decision to share the cost of correcting the overage among some or all Annex I Parties. Since over selling through the cooperative mechanisms is the most likely cause of overage for Annex I Parties that might lack the capacity to correct non-compliance, a buyer or seller/buyer hybrid responsibility regime for the cooperative mechanisms would prevent this type of problem. In effect, such a responsibility regime would apportion the cost of correcting an overage among the buying Parties, perhaps a more equitable result than collective action during the enforcement phase.

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## I. INTRODUCTION

With the adoption of the Kyoto Protocol<sup>1</sup> to the Framework Convention on Climate Change (FCCC),<sup>2</sup> the international response to the threat of global warming entered a new phase. For the first time, developed countries undertook binding commitments to limit their emissions of greenhouse gases (GHGs). An important part of the work now facing the Parties is to elaborate mechanisms designed to ensure that Parties meet their commitments under the Protocol. Broadly speaking, they must design a compliance regime. This paper considers compliance in its broad sense—ensuring and enabling Parties' implementation of their procedural and substantive obligations<sup>3</sup> under the Protocol with the aim of achieving the FCCC's objective of stabilizing atmospheric GHG concentrations at a level that "would prevent dangerous anthropogenic interference with the climate system."<sup>4</sup>

Both the Convention and the Protocol contain the basis for compliance systems, though neither provides any significant detail on what those systems will look like or how they will operate. In particular, Articles 16 and 18 of the Protocol lay the foundation for mechanisms designed to help Parties implement their commitments under the agreement

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<sup>1</sup> *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 10 Dec. 1977, FCCC/CP/1997/L.7/Add.1 [hereinafter "Kyoto Protocol" or "Protocol"].

<sup>2</sup> *United Nations Framework Convention on Climate Change*, 9 May 1992, reprinted in 31 I.L.M. 849 (1992) [hereinafter FCCC or Convention].

<sup>3</sup> For purposes of this paper, substantive obligations refer to the quantified emission limitation and reduction commitments contained in Article 3 of the Protocol, whereas procedural obligations refer to other requirements of the Protocol, such as monitoring, reporting, and conformance with relevant guidelines for participation in cooperative mechanisms.

<sup>4</sup> FCCC, *supra* note 2, at art. 2.

and to hold Parties who fail to do so accountable.<sup>5</sup> With that mandate in mind, this paper will examine issues relating to how a compliance system might be shaped to ensure maximum realization of the Protocol's objectives.

This paper suggests a dual approach to compliance based in part on the existing provisions of the Protocol. As an initial matter, the focus should be to *facilitate* the implementation of the Parties' procedural and substantive obligations. Only after a Party has demonstrated a continued failure to implement its procedural obligations or has failed to achieve its substantive obligations at the end of the commitment period would the *enforcement* phase of the compliance regime be triggered. To a degree, these two approaches share certain characteristics and rely on similar inputs. Part II below discusses in more detail the facilitation and enforcement facets of a compliance regime and the common elements of both. The unique character of the two approaches are then explored in Parts III and V.

Part IV of the paper addresses the measures that may be taken during a true-up period following the end of a commitment period but before a final determination of non-compliance is made. With respect to the substantive emission limitation obligations, the inclusion of a true-up period provides an additional opportunity to achieve the benefit of emission reductions (or offsets) without triggering the formal enforcement machinery of the Protocol. In the true-up section, the paper explores possible ways for a Party facing overage to discharge its Article 3 obligations while securing actual reductions in atmospheric GHGs. Specifically, a Party could buy *ex ante* reductions from a compliance reserve that has built up a stock of actual reductions during the commitment period, or alternatively, a Party could contribute to a fund that would then finance specific projects designed to reduce emissions or enhance offsets. In either case the price would have to be set so as to make compliance through domestic actions or the cooperative mechanisms more attractive than inaction and reliance on these true-up mechanisms.

The reader should keep an additional point in mind throughout the discussion. Regardless of the form the compliance system ultimately takes, enforcement of international obligations between sovereign states is, in the final analysis, a political act. Accordingly, back room discussions, formal and informal negotiations, posturing, inducements, threats, and subtle or blatant coercion between individual Parties or factions will likely all be methods—wholly beyond the formal structures of the compliance system—that the Parties use to achieve compliance. Still, simply knowing that a formal compliance system exists will provide leverage to Parties seeking to convince others to live up to their commitments. Moreover, the system will help develop confidence among all Parties that the Protocol can be a viable means of starting down the long road of achieving effective and equitable reductions in the world's concentrations of greenhouse gases.

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<sup>5</sup> The rules that are to be developed to implement the Protocol's cooperative mechanisms may also provide an opportunity to address compliance issues. See *infra* notes 61-63 and accompanying text.

## II. A TWO TIERED APPROACH TO COMPLIANCE: FACILITATION AND ENFORCEMENT

### A. Facilitation and Enforcement

Annex I Parties pledged in the Protocol to reduce or limit their GHG emissions to a fixed percentage of their 1990 emissions, and to do so during the course of the first commitment period scheduled to run from 2008-2112.<sup>6</sup> Because those Parties will not be required to show that they have met their assigned targets until the close of the first commitment period (or later, if a subsequent true-up period is established), the issue of whether they are in compliance with their substantive obligations will not arise, as a legal matter, until after the period ends.<sup>7</sup> Consequently, a compliance system in force during and after the first commitment period should best be viewed not as a single concept, but rather as two distinct, complementary ones. During the commitment period, Protocol requirements should give rise primarily to a managerial or facilitative approach, in which the relevant oversight body *facilitates* Annex I Parties in the implementation of their substantive obligations. After the commitment period ends and the Parties' progress is evaluated, the oversight body will be charged with the *enforcement* of those obligations.

The language of the Protocol clearly suggests that facilitating implementation and enforcement are distinct concepts. The multilateral consultative process (MCP), first described in the Framework Convention as a procedure to facilitate implementation, is endorsed by Article 16 of the Protocol.<sup>8</sup> At the same time, Article 18 of the Protocol also requires the Conference of the Parties acting as the Meeting of the Parties to the Protocol (COP/MOP) to develop an enforcement procedure.<sup>9</sup> Article 16 further stipulates that the MCP "shall operate without prejudice to the procedures and mechanisms established in accordance with [the enforcement provisions of] Article 18," thus apparently acknowledging that facilitation under the MCP could be separate from the enforcement procedure.

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<sup>6</sup> See Protocol, *supra* note 1, art. 3.1.

<sup>7</sup> This observation is potentially tempered by Article 3.2, which requires each Annex I Party to "have made demonstrable progress in achieving its commitments under this Protocol" by 2005 (i.e., three years before the first commitment period begins). However, because "demonstrable" is not defined, Article 3.2 provides no yardstick upon which "demonstrable progress" can be measured. As a result, this paragraph is, practically speaking, merely hortatory, and could not likely be used to argue that a Party was in a state of non-compliance for failing to make demonstrable progress before the end of the commitment period.

<sup>8</sup> The Protocol instructs the COP/MOP to consider applying the MCP, along with any appropriate modifications, to the Protocol. See *id.* art. 16. The MCP was authorized under the Convention for the purpose of resolving "questions regarding the implementation of the Convention." FCCC, *supra* note 2, art. 13.

<sup>9</sup> See Protocol, *supra* note 1, art. 18. The COP/MOP is instructed to "approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol . . ." *Id.*

Thus, a compliance body or bodies<sup>10</sup> could play two distinct roles under the Kyoto Protocol. First, to facilitate implementation during the initial commitment period, the body could provide assistance to Parties that are trying to comply with their treaty obligations. Second, in cases of non-compliance at the close of the commitment period or non-compliance regarding procedural obligations before, during or after the commitment period, the body could take a more forceful approach toward Parties that have demonstrated a persistent failure to adequately implement the treaty. In this capacity, a compliance body might recommend punitive measures designed to pressure an uncooperative Party to live up to its obligations.

As mentioned above, the true-up period following the end of the commitment period represents a unique point in time where these two facets of a compliance system are in equipoise. The Parties may wish to take advantage of this period to put into place mechanisms such as a Clean Development Fund or compliance reserves, discussed in Part IV, as final opportunities for Parties to avoid the enforcement regime that would be triggered by a finding of non-compliance.

## **B. Common Elements**

The two regimes—facilitation and enforcement—may overlap to a certain degree, because Parties will likely continue to need assistance in implementing their obligations after the close of the first commitment period, and because significant issues of procedural non-compliance may arise during the first period if, for example, Parties fail to submit their national reports, annual inventories, or related information to the relevant oversight body. Furthermore, each regime will depend on there being sufficient and accurate data available to evaluate the performance of the Parties with respect to their obligations.

Most international agreements contain provisions for activities such as reporting, reviewing, assessing, and promoting compliance. Under the Kyoto Protocol, the most important activities comprising the compliance system will be:

- *monitoring* by national governments of their individual progress and *reporting* information on that progress to the relevant oversight body;
- *review* and *verification* by the oversight body of information reported by the Parties; and
- *determination* by the oversight body that a Party is having a problem with its implementation, and formulation of a *response* to the problem.

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<sup>10</sup> The design of a compliance system for the Kyoto Protocol is certain to raise a number of institutional issues including whether the various functions discussed in this paper will be performed by a single compliance body, by distinct sub-bodies within a larger body, or by entirely separate bodies. In order to focus directly on the substance of compliance issues, this paper does not attempt to address these institutional issues.

The Protocol's monitoring, reporting, review and verification procedures will, for the most part, be commonly relied upon by both the facilitation and enforcement regimes, and thus they are discussed briefly in this section. Determination and response processes, however, will differ markedly depending on whether they are taken in the context of the facilitation or enforcement regimes. Determination and response activities within the facilitation and enforcement regimes will be the focus of Parts III and V, respectively.

## 1. National Monitoring and Reporting

Methodologies for national monitoring govern how the data by which a Party documents implementation of its obligations is generated, collected, verified, and compiled. Each Annex I Party is required to have a national system to estimate its anthropogenic emissions and removals in place by 2007.<sup>11</sup> Guidelines for the national systems will be agreed upon by the COP/MOP at its first session. The guidelines will "incorporate" methodologies accepted by the Intergovernmental Panel on Climate Change (IPCC).<sup>12</sup> Each national system will provide the framework under which a Party's annual inventories are produced. Annual inventories will, in turn, serve as the basis upon which a Party's fulfillment of its substantive emissions reduction targets is evaluated.

Requiring all Annex I Parties to use consistent monitoring techniques should ensure the integrity of any reduction units traded through cooperative mechanisms (emissions trading, joint implementation, and joint fulfillment). The national systems guidelines, required under Article 5, should reflect the need for conformity and reliability. The more difficult question is whether such standards should be devised only for the use of Annex I Parties implementing the Protocol, or should instead be developed with the aim of applying them to all Parties (including developing countries) that may participate in the cooperative mechanisms and/or accept binding obligations in the future. On one hand, a broad, inclusive approach could encourage participation by the greatest number of Parties and could more accurately and equitably reflect their collective interests. On the other hand, a broad approach could complicate and prolong the rulemaking process, and could lead to the adoption of less demanding rules, because developing countries might resist rules that could strain their current technical and economic capacity.<sup>13</sup>

The FCCC imposes a broad array of national reporting requirements. National communications submitted under the FCCC must include a national inventory of anthropogenic emissions by sources and removals by sinks.<sup>14</sup> Parties must also provide

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<sup>11</sup> See *id.* art. 5.1.

<sup>12</sup> *Id.* arts. 5.1, 5.2. If a Party does not use those methodologies, "appropriate adjustments shall be applied." *Id.* art. 5.2.

<sup>13</sup> Another rationale in favor of devising Protocol rules so they can be applicable to both Annex I and non-Annex I Parties is that broad inclusion may be a necessary part of demonstrating to such bodies as the U.S. Senate that developing countries are "meaningfully participating" in efforts to reduce global emissions.

<sup>14</sup> See FCCC, *supra* note 2, art. 12.1.



detailed information regarding the policies they adopt and measures they take to mitigate climate change, including the resulting projected emissions and removal levels.<sup>15</sup>

The Kyoto Protocol builds on these existing reporting requirements. Each Annex I Party must submit an annual inventory that includes the “necessary supplementary information” for ensuring compliance with its substantive reduction commitments as defined in Article 3.<sup>16</sup> It must also include in its national communications the “supplementary information necessary to demonstrate compliance with its commitments under [the] Protocol.”<sup>17</sup> The annual inventories will be the vehicle by which Parties show their progress toward meeting their emissions targets, while the national communications will demonstrate compliance with overall Protocol commitments. The COP/MOP is scheduled to adopt guidelines for both at its first session.<sup>18</sup>

In the case of the annual inventories, the supplementary information could be comprised of two non-exclusive categories: one relating to past communications by Parties and another relating to new obligations articulated in Article 3. For the first category, supplementary information might include any information that clarifies, updates, or corrects previous communications and is necessary to evaluate compliance with Article 3. For the second category, the supplementary information must include the information needed to support Parties’ baseline calculations for the six controlled gases and account for any adjustments to their assigned amounts. Adjustments to assigned amounts will be made by accounting for net changes in emissions that result from land-use changes and forestry activities since 1990,<sup>19</sup> and by adding or subtracting the results of participation in the cooperative mechanisms.<sup>20</sup> It would also be advisable for any Party intending to use the cooperative mechanisms to submit a plan identifying the mix of domestic and non-domestic emission reductions it intends to utilize to achieve its target. The plan could be updated as necessary, and would enable the oversight body to more effectively monitor progress.

## 2. Review and Verification

Adequate review and verification of a country’s efforts to implement an international agreement will enhance international cooperation, promote transparency, persuade parties to implement their commitments more fully, and help focus attention and resources on solving the problem the agreement was intended to address. Successful implementation of the Protocol’s objectives during the first commitment period will thus significantly depend on the efficacy of the review and verification of information

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<sup>15</sup> See *id.* arts. 4.2(b), 12.2.

<sup>16</sup> Protocol, *supra* note 1, art. 7.1.

<sup>17</sup> *Id.* art. 7.2.

<sup>18</sup> See *id.* art. 7.4.

<sup>19</sup> See *id.* art. 3.3.

<sup>20</sup> See *id.* art. 3.10-12.

submitted to the COP/MOP by Annex I Parties. By taking a regular and comprehensive interest in Parties' implementation efforts, and by closely tracking those efforts at several points during the commitment period, the implementation oversight body will be able to learn if a Party is having implementation problems while there is still time to do something about them. This will provide the Party and the oversight body with an opportunity to take collaborative, remedial action that could help minimize the need for an enforcement response at the end of the period.

The Convention and Protocol each contain provisions for review of the information Annex I Parties supply. Under the Convention, national communications from such Parties are subject to a process known as in-depth review (IDR).<sup>21</sup> For IDR, expert review teams conduct a "thorough and comprehensive technical assessment of the implementation of the Convention commitments by individual Annex I Parties and Annex I Parties as a whole."<sup>22</sup> The review is based on a Party's submitted communication, but Parties routinely invite the review teams to make in-country visits as well. The team members then collectively prepare a report, which is given to the subsidiary bodies. After the reviewed Party has a chance to comment on the draft, it is distributed to all Convention Parties.

The Protocol broadens the scope of IDR to cover submissions of both national communications and annual inventories from Annex I Parties.<sup>23</sup> It also specifies more procedural detail. First, the expert review teams prepare a report containing a "thorough and comprehensive technical assessment of all aspects of the implementation by a Party of [the] Protocol."<sup>24</sup> In an important new requirement, the teams are instructed to assess the Party's implementation efforts and identify any potential problems or factors influencing the fulfillment of its commitments. The reports, together with a list of the implementation questions contained in them, are then circulated by the secretariat to all Parties to the Convention. The COP/MOP, with the assistance of the SBSTA and, if appropriate, the SBI, then considers the original submission of the Party, the review team's report, and any questions of implementation listed by the secretariat.<sup>25</sup> Finally, the COP/MOP must take any decisions that may be required to assure proper implementation of the Party's Protocol commitments.<sup>26</sup>

The main shortcoming of the IDR process under the Convention has been that it is far too slow and cumbersome. IDR teams take two to three months to prepare for country visits. After their visits, three to four more months are required to incorporate host

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<sup>21</sup> *Report of the Conference of the Parties on its First Session*, pt. 2, Addendum, U.N. Doc. FCCC/CP/1995/7/Add.1, Decision 2/CP.1 (1995).

<sup>22</sup> *Id.* Annex I.

<sup>23</sup> *See* Protocol, *supra* note 1, art. 8.1.

<sup>24</sup> *Id.* art. 8.3.

<sup>25</sup> *Id.* art. 8.5.

<sup>26</sup> *Id.* art. 8.6.

country comments into the report and for the final report to be edited and published. The combined process of national communications and IDR examinations currently takes over three years, contributing to the infrequency of national communications to date. Under the Protocol, annual inventories will be reviewed on a yearly basis.<sup>27</sup> The reviews should be conducted in tandem with careful tracking of each Party's progress, to verify the accuracy of its reports. Moreover, despite these increased responsibilities, Article 8 review will have to be set up so it can be accomplished much faster than IDR has been to date. This should be possible with increased experience and with review becoming nearly a full time activity.

Significantly, the review teams' powers have been enhanced so that the teams may assess a Party's implementation and identify problems related to fulfillment of its commitments. Coupled with Article 7's requirements that annual inventories include "information for the purposes of ensuring compliance," and national communications include "information necessary to demonstrate compliance with its commitments," these new responsibilities create the groundwork for vesting review teams with genuine investigative powers.<sup>28</sup>

Related to that observation is the question of how much authority a review team or oversight body should have to go into a country to conduct an inspection or verify a report. The success of the Protocol, particularly emissions trading and other cooperative mechanisms, may hinge on the ability of review teams to verify the data submitted by the Parties. The utility of inspections, in turn, may be directly proportional to the degree to which teams are permitted to operate free of constraints from the host country. The COP/MOP will have to balance the need of the teams and/or oversight body to accomplish their mandate against the Parties' reluctance to subject themselves to intrusive investigations. As mentioned above, Parties have customarily invited IDR review teams in to facilitate consultations and clarifications of their communications. Guidelines for Article 8 review could formally provide that Parties would invite review teams in for those purposes as well as verification and inspection. Such invitations would be given upon request by the review teams and/or the facilitation body, and would not be unreasonably denied. The guidelines could further provide that if a Party failed to extend a requested invitation, the matter would be referred to the COP/MOP for discussion. This approach would retain an element of voluntariness, out of respect for each Party's sovereignty, while relying on peer pressure and the possibility of public opprobrium to ensure that the review process functioned as an effective device for tracking the Parties' implementation progress.

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<sup>27</sup> *See id.* art. 8.1 (requiring information submitted under Article 7.1 to be reviewed as part of the annual compilation and accounting of emissions inventories and assigned amounts). The frequency of national communications (and consequently their review) has yet to be decided, but should be determined by the COP/MOP as part of the guidelines the COP/MOP is scheduled to adopt at its first session. *See id.* art. 7.4.

<sup>28</sup> *See id.* art. 7.1, 7.2.

### III. FACILITATING IMPLEMENTATION

#### A. The Facilitative Approach

The goal of compliance systems in multilateral environmental agreements is not so much achieving formal compliance as improving effectiveness in altering environmentally unsustainable behavior.<sup>29</sup> A compliance system for the first commitment period should thus focus on facilitating implementation and minimizing the need for enforcement, rather than only on punishing non-compliance. This managerial, or facilitative, approach would concentrate on developing the capacity of the parties and building confidence in the treaty regime, with the aim of preparing and assisting the Parties to achieve binding, substantive commitments. The facilitative approach has been the cornerstone of other international environmental agreements such as the Montreal Protocol.<sup>30</sup>

The facilitative approach helps ensure that all parties have the institutional, technical, and financial capacity to fulfill their obligations under an international agreement. This is particularly relevant for environmental agreements like the Kyoto Protocol, in which the parties must deploy new technologies or make fundamental institutional changes in order to meet their obligations. Linking implementation with a financial or technical assistance mechanism can assist parties in progressively developing their ability to fully meet their commitments.

The facilitative approach can also help an environmental agreement develop by reinforcing the parties' sense of collective action and obligation. Because the facilitative approach strives to be flexible instead of arbitrary, it can demonstrate to parties that their pending obligations are reasonable and attainable, thereby assuring those who fear they may encounter difficulties beyond their control that they will be assisted instead of penalized for their efforts. This flexibility in turn can encourage greater participation in the regime while lowering resistance to the adoption of additional binding commitments. Thus, a regime aspiring to strict substantive targets is more likely to be accepted if it is developed through a facilitative approach.<sup>31</sup>

In recent years, several examples of the facilitative approach have been adopted in international environmental agreements. In particular, the 1987 Montreal Protocol to the Vienna Convention on Ozone Depletion has adopted such an approach to compliance that

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<sup>29</sup> See THE IMPLEMENTATION AND EFFECTIVENESS OF ENVIRONMENTAL COMMITMENTS, 661-62 (David G. Victor et al, eds. 1998).

<sup>30</sup> *Montreal Protocol on Substances that Deplete the Ozone Layer*, 16 Sept. 1987, reprinted in 27 I.L.M. 1550.

<sup>31</sup> See David G. Victor, *The Operation and Effectiveness of the Montreal Protocol's Non-Compliance Procedure* in THE IMPLEMENTATION AND EFFECTIVENESS OF ENVIRONMENTAL COMMITMENTS 137, 166 (David G. Victor et al, eds. 1998) (citing Patrick Szell, *The Development of Multilateral Mechanisms for Monitoring Compliance*, in SUSTAINABLE DEVELOPMENT AND INTERNATIONAL LAW 107 (W. Lang, ed. 1995)).

can provide guidance to the design of a compliance mechanism for the climate change regime.

## 1. The Montreal Protocol Model

The Montreal Protocol (MP) uses a flexible compliance system that has become a model for other treaty regimes.<sup>32</sup> Potential response measures are included in an indicative list, and range from technical and financial assistance, technology transfer, and training to issuing cautions and suspending treaty rights.<sup>33</sup> The latter response has been limited in practice to recommending that multilateral funding from bodies such as the Global Environment Facility (GEF) be withheld until a compliance problem is rectified.

This facilitative approach has the advantage of encouraging Parties to come forward and notify the oversight body, the Implementation Committee, of any difficulties they are having implementing or complying with their commitments. Rather than threatening immediate, tough measures against countries found to be out of compliance, the Implementation Committee has sought to reserve strong measures for use only against countries that persistently fail to live up to their obligations. This has made the job of monitoring easier, apparently because frank and responsible reporting develops more readily when the Parties are not wary of submitting information out of fear of enduring harsh, immediate reprisals. The facilitative approach has thus led some Parties to self-report difficulties before they have actually slipped into non-compliance.<sup>34</sup>

Still, it is important to consider the successes of the MP's non-compliance procedure in context. The non-compliance procedure alone has generally been effective in achieving compliance when the Parties have found it easy to comply. In more difficult cases, such as a persistent failure to satisfy reporting obligations, it has been successful only when a Party's performance has been linked to a punitive enforcement measure; namely, suspension of funding from the Protocol's multilateral fund or from the Global Environment Facility (GEF).<sup>35</sup> For instance, in late 1996, Russia was the only Party still producing and exporting ozone-depleting substances (ODS). The Implementation Committee suggested in a draft decision that further financial assistance to Russia be

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<sup>32</sup> Other regimes that utilize the MP model include Protocols adopted under the U.N. Economic Committee for Europe Convention on Long-Range Transboundary Air Pollution. *See, e.g.*, Protocol on Further Reductions of Sulphur Emissions, art. 7, *reprinted in* 33 I.L.M. 1540 (1994); Protocol Concerning the Control of Emissions of Volatile Organic Compounds, art 3.3, *reprinted in* 31 I.L.M. 568 (1992) (directing the parties to establish a compliance monitoring mechanism once the protocol enters into force). The legal drafting group of the Sulphur Protocol has proposed a compliance system that closely follows the Montreal Protocol model. *See* U.N. Doc. EB.AIR/WG.5/24, Annex I (1994).

<sup>33</sup> *See Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer*, UNEP/OzL.Pro.4/15, Annex V (1992).

<sup>34</sup> Victor, *supra* note 31, 155-160. The Implementation Committee relies solely on the data supplied by the Parties in their reports. It does not verify the accuracy of the data. *Id.* at 143-44.

<sup>35</sup> *Id.* at 138.

made contingent on improved compliance with reporting and substantive obligations.<sup>36</sup> Russia responded by introducing import and export controls on ODS and reducing ODS recycling. Subsequently, it reported dramatic reductions in ODS imports and exports, prompting the Implementation Committee to recommend that GEF funding be reinstated.<sup>37</sup>

Russia's halting implementation of the treaty demonstrates the limitations of applying a purely managerial approach when activities prohibited by the agreement present lucrative economic opportunities. This could be even more of a concern under the Kyoto Protocol, because economic pressures against implementation and compliance will likely be higher than under the MP, possibly making it harder to establish a practice of frank self-reporting.

## 2. The Multilateral Consultative Process

The facilitative approach has already been authorized by the FCCC under a "multilateral consultative process" (MCP).<sup>38</sup> In 1995, the COP created an Ad Hoc Group on Article 13 (AG-13) to study and recommend a form that the MCP might take.<sup>39</sup> AG-13 has patterned its proposals for the MCP's institutional characteristics to a significant degree after the Montreal Protocol implementation procedures. The MCP's objective is to resolve questions regarding the implementation of the Convention by "[p]roviding advice on assistance to Parties to overcome difficulties encountered by Parties in their implementation of the Convention; [p]romoting understanding of the Convention; [and p]reventing disputes from arising."<sup>40</sup> It is to be non-judicial and conducted in a "facilitative, cooperative, non-confrontational, transparent and timely manner."<sup>41</sup>

The MCP articulated by the AG-13 has not been formally adopted by the Convention's Conference of the Parties. Assuming that it will be (only the makeup of the Committee remains to be resolved), and that it also will be extended to the Protocol, its effectiveness may nevertheless be limited. The AG-13 has concluded that the MCP should be advisory rather than supervisory.<sup>42</sup> A purely advisory process that must be

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<sup>36</sup> See *Report of the Implementation Committee Under the Non-Compliance Procedure for the Montreal Protocol*, 16th Sess., Agenda Item 4, UNEP/OzL.Pro/ImpCom/16/1 (1996).

<sup>37</sup> See *Report of the Implementation Committee Under the Non-Compliance Procedure for the Montreal Protocol*, 19th Sess., Agenda Item 3, UNEP/OzL.Pro/ImpCom/19/3 (1997).

<sup>38</sup> See FCCC, *supra* note 2, art. 13.

<sup>39</sup> See FCCC/CP/1995/7/Add.1, Decision 20/CP.1.

<sup>40</sup> *Report on the Ad Hoc Group on Article 13*, 6th Sess., Agenda Item 3, annex 2, para 2, FCCC/AG13/1998/L.1 (1998).

<sup>41</sup> *Id.* para. 3. The process can be triggered in any of four ways: 1) a Party can self-report any difficulties it is having with implementation; 2) a group of Parties can self-report their difficulties; 3) a Party or group of Parties can report such questions regarding another Party or group of Parties' implementation; or 4) the Conference of the Parties may identify questions of implementation on its own. See *id.* para. 5.

<sup>42</sup> See *Report On The Ad Hoc Group On Article 13*, Sixth Sess., Agenda Item 1, para. 2, U.N. Doc.

“non-confrontational” and “non-judicial” may prove inadequate as a framework for facilitation during the commitment period. If “advisory” means simply that the COP/MOP must endorse a recommended action before it is taken, then the process could still be effective in a broad range of situations during the first commitment period. However, “advisory” and “non-confrontational” could be construed to mean that the MCP under the Protocol must refrain from providing advice that is adverse to a Party. It then might not be able to withhold multilateral funding, participation in the cooperative mechanisms, or other Protocol privileges to leverage increased implementation efforts from delinquent or uncooperative Parties.

## **B. Facilitation Responsibilities During the First Commitment Period**

An essential corollary of the review process during the commitment period will be determining whether a particular Party is having difficulty meeting its obligations, and what the response should be if there is a problem. To a significant degree, determination that a Party is having difficulty meeting its Protocol targets will follow from the expert review team’s assessment and identification of “any potential problems” in the fulfillment of commitments.<sup>43</sup> Keeping in mind that the first commitment period will be focused more on facilitation than enforcement, and with an eye to de-politicizing such decisions as much as possible, it may be advantageous for the COP/MOP to delegate as much determination responsibility as possible to the body charged with overseeing facilitation. That body would, in turn, rely heavily on the review teams’ assessments.

Considering the facilitative purposes of the body, the most productive response approaches will often be those extending “carrots” as opposed to “sticks.” It could help foster a cooperative dialogue among the Parties to explore alternative approaches to implementing their commitment period obligations. When it becomes apparent that a Party needs assistance in implementation, the body could provide advice and coordinate technological or financial assistance, or technology transfer. Such benefits would serve two purposes. First and primarily, they would assist the Party to place itself on the track of successfully attaining its implementation objectives. Second, the threat of rescinding such benefits if the Party continued failing to properly initiate or sustain implementation could serve as a kind of intermediate “stick.” Applying such leverage (or merely possessing the power to apply it) could be effective in situations where the Party’s failure was due to a lack of will, rather than a lack of capacity.

Other “stick-like” responses could include public censure in the form of referrals for discussion by the COP/MOP, notices to the FCCC Parties at large, and/or notices to interested non-government organizations and individuals. Serious or persistent failures to satisfy a procedural requirement of the Protocol, such as failure to submit a required report, could trigger more serious responses.

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FCCC/AG13/1998/2 (1998).

<sup>43</sup> See Protocol *supra* note 1, art. 8.3.

A facilitation body should have the authority to regulate or suspend a Party's participation in the cooperative mechanisms, when such participation is determined to be endangering a Party's ability to successfully implement its commitment period obligations. For example, if a Party was selling too much of its domestic emissions allocation to other Parties through Article 17 emissions trading, it would obviously be placing itself on a non-compliance track. In the interest of non-compliance *avoidance*, the facilitation body should be empowered to authorize suspension of further trading by the Party.

Article 6 suggests a "traffic light" approach. Although Article 6 deals specifically with joint implementation between Annex I countries, the traffic light approach could be adapted to the other cooperative mechanisms as well.<sup>44</sup> Under a green light, trading would proceed without restrictions so long as the selling Party was on a proper track of implementing its commitment period obligations. If actual or potential problems with the Party's implementation were identified during expert review, then a yellow light would go on, notifying buyers that they could not redeem allowances from the Party until the problem was cleared up. Finally, a red light would signify that a Party was having serious implementation problems, and would halt all transfers of allowances from the country in question.

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<sup>44</sup> See generally, Donald M. Goldberg et al, *Responsibility for Non-Compliance under the Kyoto Protocol's Mechanisms for Cooperative Implementation* (CIEL, 1998). If a question of implementation by an Annex I Party of the requirements for participating in joint implementation is identified pursuant to Article 8 review, transfers and acquisitions of emissions reduction units by the Party can continue, but they may not be used by any Party to meet its commitment period targets until the question is resolved. See Protocol, *supra* note 1, art. 6.4.



#### IV. TRUE-UP PERIOD

At the close of the first commitment period (and any subsequent commitment periods), there will need to be a limited time during which the Parties can balance their national emissions ledgers by monitoring and tallying their commitment period performance, and then “truing up” their actual emissions to their assigned targets. To avoid this becoming an overly drawn out process, the Parties’ annual inventories must be fully audited and verified during the commitment period by the expert review teams and the facilitation body on a current basis. Timely review and analysis of the inventories will more fully prepare Parties to anticipate and correct any problems they may be having *before* the commitment period ends, thereby avoiding situations where a Party suddenly discovers at the *end* of the commitment period that it has not adequately implemented its substantive requirements.<sup>45</sup>

The aim of this true-up, and the subsequent enforcement period, is to ensure that the Parties collectively meet their targets and then “make the climate whole” in cases where they fail to do so. In this way, failure to comply will not harm the Convention’s overall effectiveness in reducing atmospheric concentrations of GHGs. During the Kyoto negotiations, some Parties proposed permitting borrowing against their allocations in future commitment periods as a way of truing up. Aside from possibly allowing Parties to permanently evade actual emissions reductions by forever shifting them to some future time, borrowing would have created an incentive for the Parties to agree to inflated targets in later commitment periods that artificially absorbed the borrowed amounts. Consequently, the COP rejected the idea, and it was not included in the Kyoto Protocol. The idea has nonetheless retained its attractiveness to some of the Parties, who continue to argue that it should be approved as a way of curing non-compliance with maximum flexibility and cost-effectiveness. Because it would serve to weaken the notion of binding Annex I emissions targets, borrowing from future commitment periods should be permanently put to rest.

Parties who need reduction units in order to meet their targets during the true-up period may be unable to purchase them, because none are available on the open market. Two basic approaches could be used to respond to such a situation. First, Parties could create a compliance reserve by making *ex ante* emissions reductions during the commitment period in excess of their required targets. Second, they could pay into a Clean Development Fund (CDF), which would finance *ex post* emissions reductions in amounts commensurate with a non-complying Party’s overage.<sup>46</sup>

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<sup>45</sup> Given that only substantive obligations are linked directly to the commitment period, the true-up period and the measures suggested below apply only to cases of potential substantive non-compliance and not procedural non-compliance.

<sup>46</sup> See *Proposed Elements of a Protocol to the United Nations Framework Convention on Climate Change, Presented by Brazil in Response to the Berlin Mandate*, FCCC/AGBM/1997/MISC.1/Add.3 [hereinafter the “Brazilian Proposal”]. Among other things, Brazil proposed a Clean Development Fund into which Parties that exceeded their emissions targets would pay a certain amount per unit of excess emissions.

In addition to the primary objective of making the climate whole, these mechanisms would give Parties a final, last stop means of avoiding a pronouncement that they were in an official state of “non-compliance” with respect to their substantive obligations. Substantive non-compliance should not be triggered until the end of the true-up period. So long as a Party avails itself of the opportunity to purchase its necessary reduction units *before the true-up ends*, it will not be in a state of non-compliance, and its dealings with the mechanisms could not be considered to be part of an enforcement measure. This would have the advantage of allowing a Party to avoid embarrassment, while also providing an incentive to take advantage of the mechanisms during the true-up, rather than procrastinating.

### **A. Compliance Reserves**

A compliance reserve would act as an insurance policy in the event that some Parties exceed their assigned amounts and cannot purchase sufficient reductions through the cooperative mechanisms to solve the problem. An FCCC or Protocol institution could administer the reserve. It would be funded by commissions levied upon each completed emissions trade. The commissions would be fixed percentages of the assigned amount that was transferred. Compared to an *ex post* approach, this would have the advantage of ensuring that reduction units were immediately available to cover excess emissions, generating less overhead costs, not requiring any additional project development, not being dependent on the success of a project, and not having to rely on the delayed climate benefits of the projects.

During the true-up period, Parties that had failed to achieve their targets and were unable to acquire additional allowances from other sources could purchase an amount of credits, representing carbon reductions *already achieved*, sufficient to attain compliance. From the point of view of preserving the environmental integrity of the Protocol, this approach would be desirable because it would create emissions reduction units before they were needed, rather than after.

Some Parties may object to a compliance reserve, however, since it places an additional burden on all Parties, both good actors and bad actors alike, during the commitment period. In contrast, a CDF would only burden Parties who, at the end of the commitment period, are facing, or are in a state of, non-compliance.

A special case for compliance reserves can be made for Parties that participate in Article 17 emissions trading, since trading is likely to create additional risks. Trading could make monitoring, verifying and tracking the progress of individual Parties during the commitment period more difficult. More important, trading could create an incentive or opportunity for a Party to exceed its target by overselling its allocated amounts early on during the commitment period, so that it could no longer meet its target at the end. This scenario would most likely occur for transition countries such as Russia, which, because of its contracted economy, will have a large margin of tradable “hot air” compared to its 1990 baseline. Desperate for foreign exchange, Russia could be tempted to deliberately or

accidentally oversell its allocated amounts, thereby placing itself in a non-compliance position in which it could not possibly have been but for its Article 17 trading.<sup>47</sup>

To compensate for these risks, Parties that utilize Article 17 should be required to endow an international compliance reserve during the commitment period. For example, a small portion of the assigned amounts that change hands in each trade could be earmarked for the compliance reserve. Trading parties that find themselves over their targets during the true-up period could access the reserve and buy sufficient tons to cure their overage. Such Parties may nevertheless need to access the CDF where the compliance reserve proved insufficient to cover the overages.

## **B. Clean Development Fund**

The Clean Development Fund (CDF) could be available both to Parties who seek to avoid non-compliance during the true-up, and to those who need it to cure their non-compliance after the true-up period. Parties that had failed to attain their targets during the first commitment period would pay for an amount of GHG reductions sufficient to correct their overage. This approach is similar to the proposal made by Brazil during the Kyoto negotiations.<sup>48</sup> The payment would be used by the CDF to underwrite projects specifically designated to “make the climate whole” by removing emissions equivalent to those that had been emitted in excess of a target.<sup>49</sup> Consequently, it would be essential that the projects be of the highest caliber and have the least prospect of future failure.

To avoid the CDF becoming a solution of first choice (and creating an incentive for Parties to delay accomplishing emissions reductions during the commitment period), use of the CDF should be accompanied by measures that make it less attractive than attaining timely reductions through domestic means or the cooperative mechanisms. One solution would be to set the fee for reductions obtained through the CDF at some multiple of the “market price” of reductions. The multiplier could be flexible and fine-tuned to the particular situation, but high enough to act as a deterrent. Because large overages are more serious than small ones, it could increase at fixed percentages based on the amount purchased. In addition, it could be increased over time as the parties gained confidence in their ability to meet their targets. Any proceeds raised by the multiplier in excess of what is needed to account for the overage could be used to purchase additional reductions or could be placed in an adaptation fund. Even if a Party was using the CDF to cure its non-compliance, the multiplier would not qualify as a “binding consequence” under Article 18, because it would represent no more than a fee for the privilege of tapping a service to which the Party would otherwise not be entitled.

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<sup>47</sup> See also *infra* note 59 and accompanying text.

<sup>48</sup> *Id.* at sect. 8.

<sup>49</sup> The CDF would presumably fund projects through the Clean Development Mechanism, acting only as the financial vehicle and would thus not introduce a new level of bureaucracy into the regime.

The CDF would have fundamental advantages over a solution based on borrowing. First, its emissions reductions would not come out of a future Annex I budget. Instead, they would be genuine, project-based reductions that would be new and additional to any required for subsequent commitment periods, so that they would have the effect of balancing the Annex I carbon ledger without creating a deficit elsewhere. Second, they would be paid for in advance, and would thus provide no opportunity for a Party to defer curing its default until a later time. Third, because the offending Party would have no control over CDF funds once it had paid them, the Party would have no opportunity for playing a borrowing “shell game,” in which it repeatedly avoided its day of reckoning by rolling its reductions into future commitment periods.

The CDF could be used not only to avoid non-compliance, but also to help Parties cure their compliance if they had been unable to balance their accounts during the true-up period. However, using the CDF as a mechanism for addressing non-compliance could bring it under the auspices of Article 18, making it subject to that Article’s procedures, including development of the indicative list and, possibly, its amendment requirements if the CDF were construed as being a “binding consequence.” The best argument against such a conclusion is that a non-complying Party would not be *required* as part of the enforcement process to cure its overage through the CDF. Instead, the CDF would provide the Party with an *opportunity* to bring itself back into compliance and thereby avoid enforcement sanctions. Because the Party would be under no legal obligation to avail itself of the CDF, but could instead cure its overage in any way it chose, the CDF could not reasonably be considered a binding consequence or even a “response to non-compliance,” and thus would not trigger the Article 18 procedures.<sup>50</sup>

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<sup>50</sup> For additional discussion interpreting the meaning of Article 18’s “binding consequences” language, see *infra* note 56.

## V. ENFORCEMENT

As discussed earlier, two basic approaches are available for ensuring that Annex I Parties fulfill their Kyoto Protocol obligations: facilitating implementation of their commitments, and enforcing those commitments in the case of non-compliance.<sup>51</sup> Actual non-compliance will not be at issue regarding the Parties' substantive commitments until the close of the first commitment period, because only then will Parties be required to "true up" their cumulative emissions and demonstrate that they were within their assigned limits authorized for the five-year period. However, procedural non-compliance could be at issue during the commitment period if a Party fails to submit its national reports, annual inventories, or related information to the relevant oversight body. Thus, enforcement will be directed at two discrete areas: procedural non-compliance, and substantive non-compliance after the first commitment period. The type of available enforcement response will in turn depend on which area of non-compliance is in question.

### A. The Kyoto Protocol's Enforcement Provisions: Article 18

Historically, enforcement regimes in multilateral environmental agreements have been weak, partly because sovereign states have been reluctant to delegate binding enforcement powers to multilateral institutions over which they do not retain veto power. These weak regimes necessarily tend to rely on voluntary compliance. The Parties to the FCCC and Kyoto Protocol recognized that a regime comprised only of managerial "carrots" would be insufficient to induce them collectively to reduce their emissions. However, they were unable at Kyoto to agree on language establishing specific, binding enforcement measures in cases of non-compliance, and put off adoption of such language until a later time.

Article 18 of the Protocol instead directs the COP/MOP to "approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance. . . ." These will include an "indicative list of consequences" that takes into account the "cause, type, degree and frequency of non-compliance."<sup>52</sup> The COP/MOP will apparently devise a graduated list of ways in which the oversight body may respond to cases of non-compliance by Parties with their Protocol obligations. At one extreme, the indicative list could constitute an order to the oversight body directing how it must respond to a given situation. At the other extreme, the list could merely be discretionary, allowing the body to tailor an enforcement response to the specific act or omission. Article 18's use of the word "indicative" implies that the list will only suggest consequences of non-compliance. Specific measures will be subject to further consideration and approval by the COP/MOP before being accepted as a response that can actually be employed. This interpretation is consistent with Article 18's requirement

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<sup>51</sup> See discussion *supra*, Part II.

<sup>52</sup> The "indicative list of consequences" approach has already been used in the non-compliance procedure under the Montreal Protocol. See *Fourth Meeting of the Parties to the Montreal Protocol*, annex IV: UNEP/OxL.Pro.4/15.

that “[a]ny procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.”

How the four factors that must be taken into account are interpreted will be key to developing the indicative list. *Cause* of non-compliance might include a high economic or population growth rate in the home country, establishment of new industries, transferring away too many emissions units under Article 17 emissions trading, or even a lack of capacity. Where capacity issues are at stake, a Party’s failure might be better interpreted as an implementation problem, rather than one of non-compliance requiring an enforcement response. In fact, many or even most capacity problems could be remedied during the first commitment period, so that they are no longer causes for non-compliance after the close of the period. Nevertheless, in the post-commitment period, non-compliance caused by a lack of capacity should be distinguished from non-compliance due mainly to negligence or willful obstruction.

When evaluating cases of substantive non-compliance (i.e., failure to achieve one’s emissions target), the most relevant measure of the *degree* of non-compliance will be the amount by which the Party exceeded its assigned amount of emissions. Although in later commitment periods the degree of substantive non-compliance could possibly be linked to specific acts or omissions, the only coherent basis for consideration at the end of the first commitment period will be a comparison with the Party’s assigned amount, so that the degree would increase in severity in relation to the extent of the overage. On the other hand, the degree of a specific case of procedural non-compliance will be determined by the extent to which the act or omission impaired the ability of the oversight body, the Parties, or other interested groups to track the Party’s progress in implementing and fulfilling its substantive obligations.

*Frequency* of non-compliance during the first commitment period will be an important factor only so far as reviewing the Party’s satisfaction of its procedural obligations is concerned. It will not be relevant to evaluating a Party’s success in attaining its substantive first commitment period targets, because a Party will only be in a state of compliance or non-compliance with those obligations once—after the commitment period ends and the Party has either succeeded or failed in “truing-up” its emissions account. However, over several commitment periods frequency of non-compliance will be a relevant consideration.

As for the *type* of non-compliance, whether it is substantive or procedural will, as just illustrated above, determine whether some or all of the factors are relevant to the analysis at the end of the first commitment period. The type of non-compliance also raises the issue of fault. Presumptions of the relative degree of fault associated with a given type of non-compliance will inevitably influence how severe negotiators believe a given act or omission may be, and will in turn tend to shape the kinds of responses they deem to be commensurate with the act or omission. For instance, Parties that have made bona fide efforts to reach their emissions targets but have not managed to do so might not be treated as harshly as Parties who negligently default in their reporting obligations.

However, if the COP/MOP tries to establish a hierarchical list of responses, implying that one is more serious than another, negotiations could bog down in the legal and political minutiae of trying to quantify the relative seriousness of each prospective offense. Moreover, if fault becomes a factor that the enforcement body must specifically consider when determining a proper response, then the body will require the quasi-judicial authority of pursuing evidentiary fact-finding. The COP/MOP may be reluctant to give such power to the enforcement body. Even if it does not give the body such power, fault will still inevitably be an implicit consideration in most of the body's determinations, unless the responses are structured to be wholly automatic.

Whether the type of non-compliance is substantive or procedural will also determine the applicability of the different response measures. On a conceptual level, the enforcement regime directed toward procedural non-compliance will rely on persuasion, in the form of carrots and sticks, to induce compliance. By contrast, substantive non-compliance should engender a strict liability approach of "making the climate whole," which focuses on requiring a Party that has exceeded its emissions allocation to purchase offsets backed up by *real tons* of carbon reductions, or to pay into a CDF an amount sufficient to underwrite real future reductions. If the non-complying Party refuses to purchase its way back into compliance, then trade enforcement measures maintained until the Party remedies the situation will be a proper response.

## **B. Procedural Non-Compliance During the Commitment Period**

As part of the implementation process during the first commitment period, Annex I Parties will be required to monitor their national implementation efforts and report them (or their lack thereof) to the implementation oversight body. Obviously, that body will not be able to evaluate the Parties' performance adequately if some Parties fail to make their required submissions. Such failure should thus constitute non-compliance and be subject to the full array of Article 18 responses.

For instances of procedural non-compliance, these responses should be geared toward persuading the non-complying Party to fulfill its obligations. Persuasion may range from "carrot" responses such as financial and technical assistance, to punitive or coercive ones, like censure, suspension of Protocol privileges, fines, or trade related enforcement measures. Deterrence is an important component of persuasion, because the existence and likelihood that punitive measures may be exacted can persuade potentially non-complying Parties to instead honor their commitments.

Insufficient submissions, including those with apparently inadvertent errors, would also interfere with the objectives of the implementation process. Where insufficiency was caused by a lack of capacity on the part of the reporting Party, a facilitative response from the compliance body would be fitting. However, if the shortcomings were due to willfulness or negligence, then they would best be considered non-compliance and, like failures to report, be subject to enforcement responses commensurate with their severity.

Additionally, the Protocol requires each Annex I Party to have in place, no later than 2007, a national system for ascertaining domestic GHG inventories.<sup>53</sup> The COP/MOP is scheduled to decide upon guidelines for the system at its first session.<sup>54</sup> If the guidelines are interpreted to create mandatory standards for how those national systems should be set up, then a Party's failure to follow them during the commitment period could constitute another form of non-compliance.<sup>55</sup> Again, a response would depend on the facts and causes of the specific case, and on the relevant provisions of the indicative list of consequences.

Information upon which an enforcement decision is based will come to the enforcement oversight body through the same channels that will deliver information regarding implementation, i.e., through the national communications and annual inventories required under both the Convention and the Protocol, through the results of expert review under Protocol Article 8, and through the reporting required for participation in the cooperative mechanisms. Additionally, the body should be able to accept referrals from the COP/MOP, the subsidiary bodies, individual Parties and, under specified situations, relevant non-government organizations.

The indicative list of consequences to be defined under Article 18 will likely cover enforcement mechanisms ranging from the relatively benign (e.g., informal consultations), to the intermediate (e.g., restrictions on participation in the cooperative mechanisms), to the severe (e.g., fines and trade measures). They will thus entail some responses that are considered binding (and consequently operative only after a Protocol amendment) and some that are not. Binding responses, including fines and trade measures, may be subject to adoption only by an amendment to the Protocol.<sup>56</sup> Consequently, once adopted, their use could be considered pre-authorized by the Parties, permitting them to be implemented as necessary on a fairly automatic basis, without further consent from the COP/MOP. An automatic approach, such as a system of stepped fines, would provide the most predictable deterrent to willful noncompliance, and would reduce the chance of countries feeling that harsh consequences had been unjustifiably applied against them. For a discussion of some of the enforcement responses that could be included in the indicative list, see Annex, *infra*.

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<sup>53</sup> See Protocol, *supra* note 1, art. 5.1.

<sup>54</sup> See *id.*

<sup>55</sup> Jan Corfee Morlot, *Monitoring, reporting and review under the Kyoto Protocol*, OECD Information Paper, Paris, October 1998, p. 9-10.

<sup>56</sup> See Protocol, *supra* note 1, art. 18. Whether such responses are subject to the amendment process will depend on how broadly "binding" is defined. Most commentaries on compliance repeat the Protocol's use of the term "binding consequences" without ever addressing exactly what "binding" might mean. Generally speaking, a binding consequence would be one that affects a Party in a compulsory manner or places it under a definite duty or legal obligation to do something it would otherwise not be obligated to do. See Black's Law Dictionary 153 (5th ed. 1979). In the context of an international treaty regime between sovereigns (such as the Protocol), it would thus be a consequence of non-compliance that infringes on a right a sovereign state would enjoy in the absence of the treaty.



### C. Substantive Non-Compliance After the Commitment Period

After the first commitment and true-up periods end, it will be appropriate to direct enforcement measures toward Parties that have not stayed within their assigned amounts. Substantive non-compliance should engender a strict liability approach of “making the climate whole.” When a Party exceeds its reduction target, making the climate whole will entail removing that Party’s overage from the atmosphere. Enforcement responses such as fines or financial penalties will, by themselves, do nothing to accomplish that. Requiring the Party to purchase offsets backed up by *real tons* of carbon reductions, or to pay into the Clean Development Fund an amount sufficient to underwrite real future reductions, will.

Considering, then, the limited objectives of substantive compliance enforcement after the true-up period ends, the list of relevant enforcement responses should be short. If, after the true-up period, a Party still exceeds its target, then it should be deemed in a state of formal non-compliance. Because the review and verification process of the true-up will have culminated in a finding that a Party did or did not meet its target, it will not be necessary to revisit that question. Instead, the only relevant issue will be whether the Party has the capacity and will to cure its non-compliance. If the non-complying Party has the capacity but not the will to purchase its way back into compliance, then strict enforcement measures, such as trade measures maintained until the Party remedies the situation, would be a fitting response. For the sake of fairness and effective deterrence, responses where capacity is not called into question should be made on an automatic basis.

In such cases, the Party should still have the opportunity to buy its way back into compliance by purchasing units from the CDF and thereby making the climate whole. However, the multiplier and attending service charges for doing so should be increased when the Party is in non-compliance, and should continue to increase as the non-compliance continues. A stepped-up service charge will help offset the added costs to the Protocol Parties of dealing with the situation, and will help discourage Parties from simply delaying compliance in the knowledge that they can buy it at no additional cost at a later time.

For on-going cases of substantive non-compliance where capacity is not in question, trade measures will be a proper response.<sup>57</sup> Although the specific goods or services to be targeted will have to be tailored to the economy of the non-complying Party, and, possibly, the goods' specific linkages to GHG emissions, the basic shape of the trade measure regime should be predefined by rules of general applicability. Accordingly, the commencement date of the enforcement action should be predetermined and not contingent on negotiations after the enforcement regime is invoked, and the specific measures should follow detailed guidelines whose severity is tracked to the severity of the overage. Trade related enforcement measures should only be relaxed when the non-

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<sup>57</sup> For additional considerations regarding trade related enforcement measures, see discussion *infra* Annex.

complying Party purchases sufficient reduction units from the CDF or compliance reserve to neutralize its overage.

The enforcement responses just articulated are severe, largely because they will probably be necessary only in the most extreme circumstances. Wealthy Annex II countries who find themselves over their targets will presumably choose to preserve the integrity of the Protocol by utilizing the compliance opportunities available to them during the true-up period. If such Parties, who have the capacity and resources to comply, instead choose to renege on their commitments, then the entire Protocol regime could collapse. Consequently, it will be in the collective interest of all Annex II Parties to honor their commitments by not tripping the enforcement procedure. If, however, one of them willfully chooses to disregard its commitments, then it should rightfully be subject to the most severe sanctions.

On the other hand, the most likely source of compliance problems will come not from Annex II countries, but from economies in transition, such as Russia. An excessively severe and arbitrary enforcement regime could discourage such Parties from participating at all, and could thus diminish the overall effectiveness of the Protocol. The goal of the agreement's enforcement system should not be to punish non-complying Parties. Rather, it should be to enhance performance for protecting the climate. In most cases, a Party that fails to purchase from the compliance reserves or CDF as a last opportunity to comply with its substantive obligations will probably fail to do so because it does not have the cash reserves. Regardless of whether its non-compliance can be traced to poor planning, a misguided allocation of resources, or (most probably) overselling its allocated amounts through emissions trading, the bottom line will be that it is now unable to bring itself into compliance, and no amount of trade related enforcement measures will change that.

A more flexible enforcement approach will be necessary for such Parties. To allow for the possibility that a Party is truly unable to cure its overage, a mechanism for appellate review should be available so a Party can make a hardship case when its situation warrants. If the Party can demonstrate that it has made a good-faith effort to meet its obligations but, short of draconian measures, it is nevertheless unable to do so, then it should be granted a reprieve from trade measures. To help ensure the integrity of its decisions, the appellate review body should be insulated from the political decisionmaking of the COP/MOP. Its procedures should be streamlined to avoid giving rise to a protracted inquiry, and it should be competent to authorize flexible enforcement responses for the Party, including payment schedules into the CDF with a lowered multiplier.

### *Collective Responsibility*

Because the overriding objective of the substantive enforcement regime is to make the climate whole, there should be provisions for making it so when a non-complying Party fails or is unable to rectify its overage even after enforcement measures have been invoked. Once again, the CDF or climate reserves would be the best mechanisms for

accomplishing this. In this situation, however, it would be up to the rest of the Annex I Parties to underwrite the cost. The best way of doing this would be for all Annex I Parties, or just the wealthier ones (i.e., the FCCC Annex II Parties), to contribute funds for a compliance reserve, so that there are no questions of having to approve and appropriate funding after the fact in response to each case of non-compliance. In lieu of that, a contributory levy could be assessed upon those Parties in an amount sufficient to underwrite highly reliable CDF projects that will create reductions equal to the overage at issue.

By agreeing to collectively shoulder the costs of making the climate whole, Annex I Parties will help strengthen the integrity of the Protocol, and give themselves a stronger, vested interest in whether or not their fellow Parties live up to their obligations.<sup>58</sup> When a non-complying Party satisfies its climate debt, then the other Parties could have their contributions refunded in the form of emissions credits. Even so, contributions under this program could become quite expensive if some Parties had significant shortfalls in their emissions accounts.

#### *Buyer or Hybrid Responsibility*

In some cases, another approach might be more equitable. In the case of the largest country with an economy in transition, Russia, any overage it accrues during the first commitment period will undoubtedly be caused by overselling its allocated amounts through emissions trading. This is because Russia's severely contracted economy will result in it having a vast store of "hot air" during the commitment period, compared to its 1990 baseline. Unless it experiences one of the greatest economic recoveries of modern times, Russia will not be able to produce domestic emissions anywhere near its commitment targets. The only reason it could realistically be out of compliance at the end of the true-up will be because it traded away too much of its allocated amount.

In such a case, the (Annex II) buyer would arguably bear some of the responsibility for Russia's default, because emissions trading was agreed upon in the Protocol largely to accommodate the needs of the industrialized Parties, and because the buyer profited from its purchase by not having to make in-kind emissions reductions at home. The fairest way to allocate responsibility for making the climate whole would thus be through a buyer or hybrid buyer/seller responsibility approach to emissions trading.<sup>59</sup> Buyer or hybrid responsibility would be effective here because, if the seller exceeded its target due to overselling, the buyer's purchased credits would be irredeemable. There

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<sup>58</sup> Parties to the Montreal Protocol recently chose to take a similar approach, outside of the agreement's framework, and on a relatively modest scale. In October 1998, ten donor countries committed US \$19,000,000 to help close Russia's facilities for chlorofluorocarbons and halons by the year 2000, thus eliminating half of the world's production capacity for ozone-depleting substances (ODS). See Environment News Service, *Donors Fund Closure of Russia's CFC Factories*, Oct. 8, 1998. The ten donors decided to act when it became apparent that Russia's political and economic difficulties could indefinitely delay the ODS phaseout.

<sup>59</sup> See Goldberg, *supra* note 44.

would consequently be no Annex I climate debt to repay, and those Parties that had not taken on the risk of the transaction would not later be asked to indemnify its losses. Neither would there be a further need to pursue enforcement measures through the compliance system against the seller. Losing purchased amounts at the end of the commitment period could admittedly cause problems for the Annex II buyer; however, the buyer would be able to avoid non-compliance by purchasing offsets from the compliance reserve or, if that was unavailable, the CDF. The buyer could protect itself from financial loss through insurance or other unilateral or bilateral measures. As with any significant international business transaction, the buyer and seller to the trade would be in the best position to anticipate and address how financial risk should be allocated, by incorporating mutually agreeable terms in their contract.

In the Kyoto Protocol context, the importance of strict enforcement measures will be that they make the consequences of non-compliance very clear for all Annex I Parties, and their automaticity prevents Parties from engaging in drawn out, potentially fruitless negotiations that may only serve to delay taking action to balance the world's carbon ledgers. Combined with the safeguard of a buyer or hybrid buyer/seller responsibility regime for emissions trading, strict enforcement measures can induce the Parties to affirmatively respond to compliance problems in a preemptive way, with a view to keeping their emissions ledgers in balance and making the climate whole.

## ANNEX: ENFORCEMENT RESPONSE MEASURES

A wide range of enforcement responses will be available to address a Party's non-compliance with its procedural obligations. These could include facilitative measures such as informal negotiations with, or financial assistance to, the non-complying Party; measures tied to other Protocol mechanisms or privileges, such as restrictions on the Party's use of cooperative mechanisms; and, for the most serious cases, more traditionally punitive economic measures such as trade related enforcement measures and fines. The key to their success will be balancing them so that, on one hand, they ensure that the cost of non-compliance exceeds that of compliance, while on the other, they are not so harsh that they cause Parties to opt out of the Convention or Protocol.

### *Informal Negotiations*

Possibly the most important response for addressing non-compliance is one that will take place wholly outside the formal FCCC and Protocol institutions. Even for those agreements with strict non-compliance systems, Parties usually accomplish their aims by negotiating among themselves. The Convention's Settlement of Disputes article acknowledges this by providing that, "[i]n the event of a dispute between any two or more Parties concerning the interpretation or application of the Convention, the Parties concerned shall seek a settlement of the dispute through negotiation or any other peaceful means of their own choice."<sup>60</sup>

Informal negotiations have proved to be efficacious under the Montreal Protocol, where parties can negotiate informally rather than necessarily trigger the enforcement and compliance mechanisms. For example, Russia's delayed but now-improved compliance with its commitments not to produce or export ozone-depleting substances was brought about as much by behind-the-scenes negotiations as it was through formal dealings with the Implementation Committee. Similarly, informal negotiations will doubtlessly be an important tool for facilitating compliance under the Kyoto Protocol, particularly in the early, developing stages of the compliance system.

Informal negotiations between the enforcement oversight body and non-complying Parties may sometimes also be a useful way to achieve compliance when a Party is willing to honor its obligations but unable because of an extenuating circumstance. However, when failure to comply is willful or due to a lack of effort to marshal readily available resources, informal negotiations should play a much less prominent role.

### *Financial Assistance*

Financial assistance should likewise be available as a non-compliance response only when the Party's failure is due to a lack of capacity. Conversely, it should never be

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<sup>60</sup> FCCC, *supra* note 2, art. 14.1.

used to bribe a Party into compliance, when that Party has the ability but not the will to comply. This comports with lessons learned in the Montreal Protocol context. There, Russia's apparently sincere efforts to come into compliance by the year 2000 have convinced the Implementation Committee to recommend that continued GEF funding be favorably considered. By contrast, when Latvia failed to ratify the London Amendment, GEF funding was made conditional on the Amendment's ratification, and it was not favorably recommended until Latvia submitted a timetable for ratification.

Latvia's situation illustrates the more barbed side of giving financial assistance; namely, that it can be withheld or withdrawn if the donee fails to make a good-faith effort to correct its compliance shortfalls. While this could prove to be an effective means of inducing compliance in an economy in transition, it would not be relevant to the majority of industrialized, Annex I Parties.

### *Access to Cooperative Mechanisms*

In addition to ensuring that Parties fulfill their emission reduction commitments, a compliance system will help create confidence in the Protocol's cooperative mechanisms, thereby allowing their nascent trading markets to develop and operate in the most efficient manner possible, and in turn helping reduce emissions at a reasonable cost. Conditioning or precluding participation in the cooperative mechanisms can be a powerful tool for addressing non-compliance by Parties that plan to participate in such mechanisms.

The basic rationale of the mechanisms is to provide an opportunity for Parties having difficulty achieving their obligations to purchase excess emissions reduction units from Parties that do not need them. It would make no sense to allow a Party to sell reduction units if there were a question of its ability to achieve its own emissions target. Therefore, a Party in breach of its procedural obligations should be precluded from participating as a seller, because there might be no way of verifying that it is on a compliance track for its substantive obligations, and in turn, no way to verify that the reduction units it wants to sell have any integrity.

The question of which participant should be held liable when a trading partner fails to live up to its commitment period obligations has been examined extensively in other fora, and will consequently not be addressed here.<sup>61</sup> However, because participation in the mechanisms will be a privilege and not a right, restrictions on a Party's participation will not constitute "binding consequences" that trip Article 18's amendment requirement.<sup>62</sup> As a result, the facilitation and/or enforcement bodies should be given

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<sup>61</sup> See, e.g., Goldberg, *supra* note 44.

<sup>62</sup> This is so because such restrictions would affect privileges created by the Protocol itself, not fundamental rights that sovereign states enjoy outside of the treaty regime. A Party's privilege to engage in activities such as emissions trading or joint implementation is held subject to the Protocol's terms. Those terms provide that the COP/MOP will devise guidelines governing participation in the activities. See, e.g., Protocol, *supra* note 1, arts. 6, 12 and 17. Inherent in any guidelines will be provisions for eligibility in the

wide discretion to use the mechanisms as “sticks” to assure that Parties live up to their implementation and compliance obligations.

Punitive restrictions on a Party’s use of the mechanisms could be tied to the Party’s fulfillment of both its procedural and substantive obligations during or after the first commitment period. Additionally, the mechanisms hold the potential of leveraging a Party’s compliance with Protocol objectives without utilizing the formal non-compliance system. This could be done by adopting provisions in the eligibility rules for each mechanism stipulating that, as a condition of engaging in it, a Party must agree in advance to accept binding arbitration should a question arise concerning *any* of its FCCC or KP obligations.<sup>63</sup> Moreover, the condition could provide for liquefied damages in the form of fines or other measures if the Party failed to honor the arbitration agreement. Such a scheme could serve to introduce “harder” enforcement rules into the non-compliance system without first having to go through the Article 18 amendment process. Parties to such agreements could include potential buyers, sellers, and/or the relevant oversight committee.

#### *Fines and Trade Measures*

In the past, parties to multilateral environmental agreements have been loath to subject themselves to the possibility of trade-related compliance measures and financial penalties. However, under the Kyoto Protocol, Annex I Parties who renege on their obligations will not only harm the global environment, but possibly also obtain a distinct economic advantage over those Parties that do comply. The Parties were thus more amenable at Kyoto to considering the prospect of binding economic enforcement measures. Nonetheless, they ultimately failed to agree on the use of such measures, and instead Article 18 provides that any enforcement procedures entailing binding consequences must be adopted by amendment to the Protocol.

Consequently, binding economic enforcement measures will only be a viable tool for the enforcement body if they are first adopted through an amendment.<sup>64</sup> A system of

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activities. By accepting the Kyoto Protocol, a Party will agree to abide by the guidelines referred to therein, and thus will implicitly accept the possibility that those guidelines may dictate the terms under which the privileges to participate in the activities will be granted or denied.

<sup>63</sup> The dispute settlement provisions of FCCC, *supra* note 2, art. 14 (made applicable to the Protocol by Protocol Article 19) currently allow Parties to voluntarily make a declaration at the time they ratify or accede to the FCCC stating that they agree to accept arbitration in the case of a dispute with a Party that has accepted the same obligation. Arbitration tied to the cooperative mechanisms would differ from this wholly optional arbitration in that it would be a required prerequisite to participation in the mechanisms.

<sup>64</sup> Depending on the will of the Parties, separate amendments could be adopted for individual forms of “binding consequences.” Alternatively, the enforcement measures could be collectively adopted in an omnibus amendment which either defined them individually and in detail, or which delegated to the enforcement body the power to define them. The former approach would facilitate adoption of those binding measures that enjoyed broad support without “holding them up” while more controversial measures were debated. However, any amendment to the Protocol will likely be very difficult to procure. Thus, the latter, omnibus approach may in fact be not much more difficult to adopt than the individual approach,

graduated fines levied against non-complying Parties would be the easiest and most predictable economic enforcement measure to administer, and it would have the added attraction of not implicating World Trade Organization (WTO) law, as trade measures might. However, actually collecting fines levied against recalcitrant Parties could prove problematic, particularly where the Party is cash poor or where appropriation of payment must come from a political body that is hostile to implementation of the treaty.

If economic enforcement measures are adopted, the enforcement body should consider not only their deterrence potential, but also the overall aims of the Protocol. For example, when considering a trade measure,<sup>65</sup> the body should take into account such questions as whether the non-complying Party is a net exporter or importer of fossil fuels, and what the principal sources of its emissions are and target any such measures so as to discourage those activities that are linked to GHG emissions.

Ultimately, trade measures might be the only way to force habitually uncooperative Parties to comply with their obligations. Because of their severity, they would properly be implemented only upon a recommendation from the compliance body subsequently approved by the COP/MOP. Trade related enforcement measures could begin with import restrictions on GHG-intensive exports of the targeted country, and could then range to a broader ban on trade in many categories of goods. However, such enforcement measures, which would tend to be aimed at the environmental harm caused by the *process* of making the goods rather than the harm literally caused by the goods themselves, could invite WTO complaints by the targeted Party of illegal trade discrimination, if that Party is a WTO member. The Party applying the COP/MOP authorized trade measure would have to meet the standard of proving that the trade related enforcement measure was “necessary to protect human, animal or plant life or health” or related to the conservation of an exhaustible natural resource.<sup>66</sup> Meeting the requirements of the WTO should be simple, as a Party to a multilateral environmental agreement (MEA) will almost certainly be deemed to have waived its WTO rights insofar as the MEA is concerned. The best way to avoid WTO complications in the event that

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while having the advantage of authorizing a comprehensive menu of enforcement tools.

<sup>65</sup> While the treaty regime may authorize or direct Parties to take trade measures against a non-complying Party, the measures themselves will be implemented on the national level.

<sup>66</sup> See General Agreement on Tariffs and Trade (GATT), *opened for signature* Oct. 30, 1947, 61 Stat. A5, 55 U.N.T.S. 187 (entered into force Jan. 1, 1948), art. XX (b) and (g). GATT/WTO dispute panels may not apply any body of law other than that of the GAT/WTO when making their decisions. See, e.g., GATT Dispute Panel Report on Canada: Measures on Export of Unprocessed Herring and Salmon, B.I.S.D. (35<sup>th</sup> Supp.) at 98-115 (1987). Though the GATT/WTO has struck down numerous environmentally inspired trade measures taken *unilaterally* by members, it has never ruled against a trade related measure taken under the authority of a multilateral environmental agreement. See World Trade Organization, *Trade and the Environment in the WTO* (visited Feb. 17, 1998) <<http://www.wto.org/environ1.htm>>. (WTO supports multilateral solutions to global and transboundary environmental problems; unilateral actions should be avoided). For further discussion of the trade and environment issue, see *generally* THE USE OF TRADE MEASURES IN SELECT MULTILATERAL ENVIRONMENTAL AGREEMENTS (Robert Housman et al., eds., UNEP Environment and Trade Series No. 10, 1995).



trade enforcement measures are used against a Protocol Party would be to include a specific waiver of WTO rights in the relevant guidelines promulgated by the COP/MOP or in the Protocol amendment authorizing the use of the enforcement measures.

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