

Status of the UNFCCC Negotiations:

Outcomes of the Bonn Climate Change Talks,
June 1–12 and August 10–14, 2009

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Abbreviations and acronyms

AWG-KP	Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol
AWG-LCA	Ad Hoc Working Group on Long-term Cooperative Action under the Convention
CDM	Clean Development Mechanism
COP	Conference of the Parties
GDP	gross domestic product
GHG	greenhouse gas
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land-Use Change and Forestry
NAMA	nationally appropriate mitigation actions
REDD	reducing emissions from deforestation and forest degradation in developing countries
UNFCCC	United Nations Framework Convention on Climate Change

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1.0 Introduction

Member countries of the United Nations Framework Convention on Climate Change (UNFCCC) are holding a series of negotiations on a post-2012 emission reduction regime, with the aim of adopting an agreement at the fifteenth Conference of the Parties (COP 15) in Copenhagen, Denmark, in December 2009. This paper provides an overview of the status of the international climate change negotiations, with an emphasis on the outcomes of the climate change talks that occurred in Bonn in June and August (Bonn II and Bonn III). We reviewed the outcomes of Bonn I in an earlier paper (Murphy & Drexhage, 2009).

The main objective of the second Bonn meeting, in June, was to develop a negotiating text. Bonn II was defined by the “six-month rule,” a provision that any amendments to the Kyoto Protocol or other legal instruments proposed for adoption in Copenhagen must be communicated to the parties by June 2009. Negotiations are certain to continue until the end of COP 15, and there may be last-minute surprises, as was the case in the Kyoto process with the Clean Development Mechanism (CDM) coming into form in the last week of negotiations, but the main ideas should be in the June 2009 proposals. The June meeting began with a 53-page document and ended with a 200-page revised negotiating text after countries submitted additional proposals (UNFCCC, 2009b).

Bonn III, in August, focused on how to proceed with the 200-page revised negotiating text. While there was some hope that countries would streamline the text, consolidate it and make it more manageable, countries were not ready to give up any traditional positions they carried into the negotiations. If anything, those positions were reiterated. Many countries felt that consolidation would risk losing some ideas, and no agreement existed on areas of convergence or divergence to begin shortening the text. The 200-page negotiating text remains on the table, accompanied by a plethora of non-papers (working documents), tables and tools to assist negotiators in navigating through the issues.

This lack of progress is only one example of a developed country–developing country divide in the negotiations. In August developing countries tended to prefer general discussions of the issues reflected in the text, while developed countries stressed the need to streamline and consolidate texts so that “real” line-by-line negotiations could start in Bangkok in September and October. With only three weeks of negotiations remaining before Copenhagen (two weeks in Bangkok and one week in Barcelona in November), the pace of negotiations will need to increase if a deal is to be reached in December. Yvo de Boer, executive secretary of the UNFCCC Secretariat, said at the conclusion of the August meetings that “negotiations will need to considerably pick up speed for the world to achieve a successful result at Copenhagen” (UNFCCC, 2009a).

This paper is informed by the summaries of the Bonn Climate Change Talks prepared by IISD's Reporting Services (Akanle et al., 2009; Appleton et al., 2009). It examines the main issues at stake in the negotiations, with an emphasis on the four pillars of the Bali Action Plan: mitigation, adaptation, technology and financing. The Bali Action Plan was agreed to in December 2007 and set out a two-year process for reaching a climate agreement, expected at COP 15.¹ The concluding section discusses critical issues on the road to Copenhagen.

2.0 Background

Climate change is commonly identified as one of the most urgent and critical issues facing the world. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC, 2007) confirmed that the warming of the climate system is unequivocal and human actions are changing the Earth's climate. This is creating major disturbances for ecosystems, with huge consequences for human development and well-being. Recent climate research supports the overall conclusions of the IPCC, and some believe that the IPCC's predictions were too cautious. Recent climate events and research findings include the following:

- In 2008 one of Canada's five remaining Arctic ice shelves—the 4,500-year-old, 50-square-kilometre Markham Ice Shelf—broke completely away from Ellesmere Island. Warmer temperatures and warmer oceans play a role in the collapse of ice shelves. The Arctic has warmed by about 2°C over the last 50 years but, more dramatically, has warmed by about 5°C in the winter (Michon, 2008).
- The Greenland ice sheet is melting faster than expected. The ice sheet may be responsible for nearly 25% of global sea rise in the past 13 years. Oceans are currently rising by more than three millimetres a year—more than 50% faster than the average for the 20th century (Hanna et al., 2009).
- The ocean is warming about 50% faster than reported by the IPCC, and sea-level rise is happening at an even greater rate than projected because of thermal expansion of sea water (Church, Domingues, White, Barker & Gleckler, 2009).
- Ocean acidification is a direct consequence of carbon dioxide emissions, with the ocean having taken up around 27% to 34% of the carbon dioxide produced by humans since the industrial revolution. This creates a change in ocean chemistry, which is a serious threat to many organisms and has implications for food webs and ecosystems. For instance, there are reports of a 19% decrease in growth of Great Barrier Reef corals (Turley & Scholes, 2009, p. 15).
- A study has linked human-induced climate change to altered precipitation patterns, bringing more rainfall to Canada, Northern Europe and Russia and drier weather to tropical and

¹ The Bali Action Plan can be accessed at <http://unfccc.int/resource/docs/2007/COP13/eng/06a01.pdf#page=3>

subtropical areas north of the equator. Future projections show Canada having more overall precipitation throughout the year, but the summers will be particularly dry for the southern Prairies (Zwiers & Hegerl, 2008).

The goal of the UNFCCC is “to achieve...stabilisation of greenhouse gas [GHG] concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (Article 2). The UNFCCC, which came into force in 1994, sets out an overall framework for international efforts to tackle the challenge of climate change. The Kyoto Protocol, which entered into force in 2005, is an addition to this treaty that sets legally binding targets for reducing GHG emissions for 37 developed nations and the European Community. These targets amount to an average of a 5% reduction in emissions from 1990 levels over the five-year period from 2008 through 2012. The major distinction between the convention and protocol is that the convention *encourages* industrialized nations to stabilize GHG emissions, while the protocol *commits* them to doing so.

The 2009 negotiations are focused on reaching an agreement on the commitments and structure of a climate regime for after 2012, when the first commitment period of the Kyoto Protocol ends. The climate change talks are carried out on two main tracks:

- Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention (AWG-LCA). Includes 192 countries that have ratified the UNFCCC, and is attempting to reach an agreement on an international strategy for addressing climate change after 2012. Negotiations in this group focus on four main areas set out in the Bali Action Plan: mitigation, adaptation, technology and financing.
- Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP). Includes 183 countries and one economic region (the European Economic Community) that have ratified or accepted the Kyoto Protocol. Notably, the United States is not a member of this group. This working group is considering future developed-country targets under the Kyoto Protocol, aiming to complete its work by the end of 2009.

Other UNFCCC bodies also contribute to the post-2012 negotiations through related discussions. Under the COP, the Subsidiary Body for Implementation deals with such issues as financial mechanisms, technology transfer and capacity-building. Also under the COP, the Subsidiary Body for Scientific and Technological Advice includes technology transfer, adaptation, and reducing emissions from deforestation and degradation in developing countries (REDD). The Conference of the Parties Serving as the Meeting of the Parties brings together those countries that have ratified or accepted the Kyoto Protocol. Discussions related to the long-term negotiations include the CDM, adaptation and capacity-building.

3.0 Mitigation

Negotiations on mitigation, or reduction of GHG emissions, take place in both ad hoc working groups. The AWG-LCA is discussing a long-term global goal for emission reductions as one issue of the “shared vision” for long-term cooperative action. The AWG-KP is negotiating the emission reductions required by Annex I Parties under the Kyoto Protocol in the subsequent commitment period (post-2012).

3.1 Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention

In the AWG-LCA negotiating text, the 82-page chapter on “Enhanced Action on Mitigation” included sections on mitigation by developed countries, mitigation by developing countries, REDD plus conservation (REDD+), cooperative sector-based approaches and sector-specific actions, and market-based approaches, including the cost-effectiveness of mitigation options.

Discussions on **mitigation by developed countries** focused on the nature of commitments and how to define them and on comparability of effort. Countries have agreed that a long-term emission-reduction goal is necessary, although it may take until COP 15 to agree on a number. The United States supported legally binding, mid- and long-term, quantifiable emission reductions with a timetable. Canada noted that developed countries must take the lead through mid-term emission reductions and called for a holistic view of comparability of efforts.

In regard to **mitigation by developing countries**, talks centred on nationally appropriate mitigation actions (NAMAs), recognition of unilateral actions and how to ensure that actions are measurable, reportable and verifiable. The Group of 77 and China negotiating bloc stressed that NAMAs are not be considered mitigation targets for developing countries. Several developing countries, including China and Indonesia, noted that NAMAs should not be financed through the carbon market (that is, NAMAs cannot generate credits to sell as offsets on the carbon market, similar to the CDM). Canada suggested looking at range of considerations to help understand the design and impact of market-based mechanisms. Canada also identified the need to set priorities and to recognize links to financing. A particularly controversial topic was differentiation, including the suggestion of developing criteria for categorizing developing and developed countries (essentially suggesting that some major developing emitters, such as South Korea and China, take more stringent actions than other developing countries). Developing countries rejected such proposals.

REDD+ was one area where parties agreed that negotiations on the text of REDD or REDD+ could begin in Bangkok. A number of critical issues need to be addressed: whether REDD+ will be market- or fund-based or a combination of both; baseline calculations; issues of non-permanence, the scope of REDD+; and accounting at the national or subnational level. A number of developing countries, including the Philippines, Papua New Guinea, Thailand, Guyana and Pakistan, noted the need for REDD+, though Brazil stated its preference for a focus on forests. Several countries called for a phased approach to a REDD+, beginning with capacity-building and eventually moving to implementation. Papua New Guinea noted that forests are impacted by outside actions, and a REDD mechanism will need to be more inclusive in the future, being able to bring in agriculture and rural energy.

In the discussion on **cooperative sectoral approaches and sector-specific actions**, developing countries stressed that these should not be used to set sectoral targets or goals in developing nations or to compare sector-specific actions between countries and regions. International bunker fuels are included in this section, and several developed countries called for the shipping and aviation sectors to be included in a new agreement. Some developing countries expressed concern about constraints on their airlines and impacts on shipping (75% of ships in international trade are registered in developing countries).

The discussion on **market mechanisms** focused on new mechanisms, including sectoral crediting and trading and NAMA crediting and trading. Countries agreed to develop a table for Bangkok that would assess potential mechanisms against agreed-to criteria, which could include environmental integrity, sustainable development benefits, regional equity, potential to generate credits and potential linkages to the current CDM.

3.2 Ad Hoc Working Group on Further Commitments for Annex I Parties Under the Kyoto Protocol

Under the AWG-KP, discussions focused on Annex I countries' aggregate and individual emission reductions, potential consequences of response mechanisms and other issues, including flexibility mechanisms; land use, land-use change and forestry (LULUCF); greenhouse gases, sectors and source categories; common metrics to calculate carbon dioxide equivalents of anthropogenic emissions by sources and removals by sinks; and methodological and other issues. The four documents that were prepared for the Bonn III talks will be revised for Bangkok.² A single negotiating text has yet to be prepared, and no decisions have been made.

The parties did not reach an agreement on the scale of emission reductions to be achieved by Annex I Parties individually or in aggregate. Most developing countries support Annex I reductions of at

² These documents can be accessed at http://unfccc.int/kyoto_protocol/items/4577.php

least 25% to 40% below 1990 levels by 2020.³ Many developing countries levelled criticisms at developed countries over “weak” emission reduction targets and noted their lack of commitment. Developed countries emphasized the difficulty of discussing comparable targets because not all countries are involved in the Kyoto Protocol negotiations (referring to the absence of the United States).

Canada, along with New Zealand, Japan, Russia and Norway, presented its targets in a technical exercise on “possible targets submitted by parties.” Canada described its national target to reduce emissions by 20% from 2006 levels by 2020, stating that this is a mid-term target leading to a 60% to 70% reduction by 2050 from 2006 levels. Canada explained that the target is not conditioned on the outcome in Copenhagen, and the base year of 2006 is the first year for which complete data were available. Canada noted that the 2020 target will be met solely by domestic actions. Canada did not use LULUCF in its calculations (currently it is not mandatory to include LULUCF in reporting under the Kyoto Protocol) and disagreed with mandatory inclusion. Canada stated that it cannot be held responsible for the rise in LULUCF emissions, because these are largely due to natural, non-anthropogenic developments, such as an increase in forest fires and the effect of the mountain pine beetle. Canada also remarked that LULUCF emissions were abnormally low in 1990 and therefore are a misleading measure.

The AWG-LCA discussed the flexibility mechanisms—emissions trading, joint implementation and CDM—focusing on possible improvements. In regard to the CDM, issues under consideration included standardized baselines, multiplication and discount factors, positive or negative lists, promoting co-benefits, improving access to the CDM by specified developing countries, graduation of developing countries, the inclusion of carbon capture and storage and nuclear power, and crediting based on NAMAs. No decisions were made, and many developing countries (such as China and Brazil) opted for “no decision”—preferring to avoid any major changes to the CDM.

LULUCF discussions centred on land-based accounting, natural disturbances and forest management, CDM-related issues and data submission. Many countries stated that a land-based accounting approach is a desirable long-term goal, but they are not ready to support this in the next commitment period. In regard to expanding the eligibility of LULUCF activities under the CDM, China and Brazil supported the status quo, including only afforestation and reforestation activities. Many other developing countries stressed that broadening the eligibility of LULUCF activities to include, among other things, soil carbon management in agriculture, wetlands and sustainable forest

³ The IPCC Working Group III findings, which are referenced in the Bali Action Plan, note that global emissions of GHGs need to peak in the next 10 to 15 years and be reduced to very low levels, well below half of levels in 2000, by the middle of the 21st century in order to stabilize concentrations in the atmosphere, and that achieving the lowest stabilization level assessed by the IPCC would require developed countries as a group to reduce emissions by 25% to 40% below 1990 levels by 2020. See Gupta et al. (2007, p. 776).

management could help improve the geographical distribution of CDM projects. The Group of 77 and China are divided in their positions in these discussions, with major developing country emitters preferring an unchanged CDM (likely because they have experienced considerable economic benefit from the mechanism), and African nations preferring to broaden the treatment of LULUCF and REDD activities under the CDM and other new market mechanisms.

The discussion of the potential consequences of response measures was primarily concerned with measures to respond to and limit the impact and consequences that climate change actions would have on developing countries. These could include measures such as compensation for falling revenues for exports of fossil fuels because of increases in carbon taxes. A point of disagreement between developed and developing countries was whether to reference positive impacts of climate change in addition to negative ones when discussing how to minimize negative impacts on developing countries. The European Union wanted to include a reference to the positive consequences of response measures, because, as one negotiator said, “ignoring them is a negative consequence.” Saudi Arabia said this would be pointless, as it is self-evident and the focus of the work was on negative consequences for developing nations.

A particularly controversial discussion centred on the linkages between the two ad hoc working groups. Several developed countries called for joint sessions between the two working groups. Areas of overlap include discussions on mitigation, market mechanisms (NAMA crediting and sectoral crediting under the AWG-KP and new market mechanisms under the AWG-LCA), proposals to extend the share of proceeds to joint implementation and emissions trading under the AWG-KP, and discussions on adaptation and finance under the AWG-LCA. Developed countries noted the difficulty in discussing Annex I Parties’ aggregate emission reductions in the absence of the participation of some major emitting nations. Many developed countries are reluctant to negotiate targets for Annex I countries under the AWG-KP without knowledge of commitments from the United States and advanced developing countries—nations that are not obligated to take on commitments under the current structure of the Kyoto Protocol. Many developing countries, particularly the advanced developing countries, are keen to keep the two negotiating processes separate because it provides them cover in their attempts to ward off increasing pressure to take on international commitments to limit their GHG emissions.

4.0 Adaptation

Adaptation was discussed under the AWG-LCA. This 41-page chapter of the negotiating text included sections on objectives, scope and guiding principles, implementation of adaptation actions, means of implementation, risk reduction, institutional arrangements, and monitoring and reviewing action and support. At Bonn III, discussions were held on areas of divergence and convergence, and

a consolidated text will be ready for Bangkok, which will allow progression to line-by-line negotiation. The general feeling was that adaptation was one area where progress exceeded expectations.

All generally agreed that adaptation is essential and an overarching framework for adaptation is needed. Developing countries called for equal treatment of adaptation and mitigation, scaling up funding, and adequate and predictable funding. Most developing countries have called for public grant funding that is additional to official development aid, and hold the position that funding from developed countries should be subject to a monitoring, reporting and verification regime. Developing countries want a mechanism for facilitating and coordinating their access to financing, and have called for institutional arrangements that are under the COP's authority. China called for an adaptation committee and regional centres in developing countries.

Developed countries have recognized the importance of adaptation and the need to scale up support, with financing coming from multiple sources, including private funds and carbon markets. They noted that adaptation requires more public support than mitigation. Many developed countries, including Canada, emphasized that adaptation should be country-driven and priority should be given to the most vulnerable. Developed countries noted the role of the UNFCCC in facilitating and catalyzing activities. They noted that a range of bilateral, regional and international mechanisms and channels should be used to deliver climate change support.

5.0 Technology and capacity-building

Technology and capacity-building were discussed under the AWG-LCA. This 36-page chapter of the negotiating text, "Enhanced Action on Development and Transfer of Technologies," included sections on objectives; scope and guiding principles; promoting policies for cooperation between developed and developing countries on technology research, development, diffusion and transfer; and institutional arrangements, including funds. A section on capacity-building was also included.

Parties are far from attaining consensus on technology and capacity-building or even reaching a common understanding of the issue. At Bonn II and III, countries held divergent views on the means of implementation, institutional arrangements, intellectual property rights and funding sources.

Developed countries have stressed the need to catalyze private sector investment in technology development and transfer, and have emphasized the importance of the carbon market. The European Union urged a link between technology transfer and low-carbon development strategies, Norway and Switzerland proposed the development of national strategies and action plans, and the

United States stressed voluntary, technology-oriented agreements. Developed countries emphasized that the intellectual property rights regime promotes technology transfer, and they opposed any modification of the intellectual property rights system.

Developing countries pointed to clear divergence between developing and developed countries on a number of issues and emphasized that funding outside the framework of a UNFCCC financial mechanism would be unacceptable. Many developing countries stressed the need for public sector funding for technology transfer. The African Group opposed making funding conditional on national strategies, and Pakistan and Mexico questioned whether voluntary arrangements would effectively facilitate technology transfer. Some developing countries maintained that the intellectual property rights regime is a barrier to effective technology transfer and called for reforming the current system under the World Trade Organization.

Capacity-building was discussed in a separate session. Many developed nations, including Canada, stressed that capacity-building is a cross-cutting issue relevant to all elements of the Bali Action Plan and should be integrated into all sections of the text—they do not see the need for a separate section. Developing countries called for capacity-building to be retained as a distinct section.

The parties made little progress on technology transfer at Bonn II and III, and discussion of this issue have evolved to include capacity-building. The Group of 77 and China called for action and criticized developed countries for their emphasis on research and action plans that their negotiator said “don’t go anywhere” (referring to developed countries’ perceived lack of progress in this area under the Kyoto Protocol and the convention). They expressed a need to go back to a discussion of guiding principles and objectives, and they emphasized that the text did not represent a negotiating document. They reached general consensus on the need to work in smaller groups in Bangkok to facilitate discussion, recognizing that all text is still on the negotiating table.

6.0 Financing

“Enhanced action on the provision of financial resources and investment” (as the relevant chapter of the negotiating text was called) was discussed under the AWG-LCA. The 23-page chapter includes sections on objectives, scope and guiding principles, provision of financial resources and institutional arrangements, including funds. Points of divergence among parties included the source of funds and institutional arrangements.

Developing countries highlighted the need for adaptation funding over and above existing official development aid; bridging the gap between existing and required funding; new, additional and predictable sources; and simplified access without conditions. They also stressed the need for public

financing and called for an equitable governance regime with a financial mechanism, under COP guidance, that provides direct and easy access to resources for developing countries. The African Group indicated that it would not accept an agreement without a financial commitment of 1% of GDP from developed nations and would not support differentiation among developing countries for access to financial resources. In contrast, Antigua and Barbuda supported differentiation of countries on the basis of vulnerability. The Group of 77 and China discussed difficulties with access to financing through the Global Environment Facility, the current financial mechanism of the UNFCCC, and emphasized that funding pledged outside the convention would not be counted as meeting commitments under the UNFCCC. Many developing countries, including the least developed countries, called for a multi-window financial mechanism that supports the building blocks set out in the Bali Action Plan.

Developed countries generally supported the need for private funding and carbon markets in addition to public finance. Canada highlighted the need to catalyze private financial flows and investments, called for prioritizing the needs of the poorest and most vulnerable countries, and emphasized the need to maximize the effectiveness of existing institutions. Australia called for a decentralized approach to facilitate access to funding, and the United States stressed the need to make the connection between the provision of financing and actions, including specifying what the financing is provided for. In regard to the financial architecture, most developed countries have stressed the need to discuss functions, not entities. Most developed countries want to build new financial mechanisms on the basis of existing institutions, such as the Global Environment Facility and World Bank.

7.0 The road to Copenhagen

Both AWGs will meet twice more before Copenhagen: in Bangkok, Thailand, in September/October and Barcelona, Spain, in November. The meetings to be held September 28 to October 9, 2009, will include the seventh session of the AWG-LCA and the ninth session of the AWG-KP.

The AWG-LCA aims to finalize a deal, reaching agreement on global mid- and long-term emission reduction goals, comparability of mitigation efforts by developed countries, and measurement, reporting and verification (MRV) in the context of developing country mitigation actions. The discussions on financing will also need resolution—determining whether and what type of financing should be developed to support developing country mitigation (including REDD) and adaptation actions. The AWG-KP has a clear objective for December 2009: to agree on further commitments for developed countries after 2012.

Progress has been slow, and the pace of the negotiations will need to pick up in Bangkok if the world intends to reach agreement in Copenhagen. The 200-page revised negotiating text is full of brackets where issues are unresolved, and it will need to be whittled down to a 30- to 40-page agreement. The parties have little time to undertake such a task, and there are divergent interests, with developed country–developing country tensions a constant at the climate change talks. A “backloading” strategy—that is, “holding off decisions until the very end of a negotiating process on the assumption that nothing is agreed until everything is”—may not achieve the desired results (Schunz, 2009). The pace of discussions and the number of complex issues might prevent a last-minute deal similar to the one agreed to in Kyoto in 1997. Some negotiators and observers are suggesting that a deal will not be reached in Copenhagen.

Negotiators might get much-needed political guidance before Bangkok. Climate change is the primary topic on the agenda of a series of high-level meetings before Bangkok, including the UN General Assembly special summit on climate change, a meeting of the Major Economies Forum, and a Group of 20 meeting. These meetings might provide momentum for Copenhagen and help to provide political guidance, but some developing countries have questioned the appropriateness of bringing ideas from these processes into the UNFCCC negotiations.

The position of the United States is a large factor in the negotiations. The United States has indicated that it will use whatever domestic legislation it passes as the basis for its emission-reduction commitments, but there is no guarantee that the U.S. Congress will pass climate legislation before December. Recent messages out of Capital Hill indicate that it is less and less tenable that a bottom-up approach will result in an emission-reduction target that will have consensus in Washington prior to COP 15. All indications are that the target of stabilization to 5% below 1990 levels by 2020 is not contentious, but rather the argument surrounds the mechanisms for achieving such a target. The cap-and-trade mechanism remains contentious, and Blue Dog conservative Democratic senators are working with Republicans to weaken the emissions-trading framework. This is being somewhat counteracted by strong messages out of the Environmental Protection Agency that unless a robust system is approved by both houses of the U.S. Congress, the agency has an obligation to fill the void and issue stronger rules. The United States will probably go to Copenhagen with an emission-reduction target ranging from 0% to 5% below 1990 levels, but it is hard to predict the dynamics of the high-level negotiations. Last-minute changes could occur, similar to the Kyoto process, though the prospects of this seem less likely than at Kyoto.

The United States is seeking an international agreement that contains mitigation targets for industrialized countries and binding commitments on the part of major developing economies. This may not be too significant, because the country does not support committing to international legal obligations that are internally binding. As well, the United States does not support an internationally binding agreement with punitive consequences for non-compliance. The prospect of a climate

regime with a continued strong distinction between Annex I and non-Annex I parties is likely to come under fire in Copenhagen. The United States said its obligations would involve both actions and outcomes, including targets, and it expects developing country obligations to be only actions. But the difference is minimal if there is no strong, internationally binding compliance regime. Developing countries, led by India, only want stronger Annex I targets for a second commitment period of the Kyoto Protocol, but the United States will never agree to be a part of this protocol.

A final deal could result from a U.S.-China accord. Strong rumors persist that there will be a list of announceables between these two political, energy and economic superpowers, which together account for 40% of global carbon dioxide emissions. The real question is whether China would break from India's bottom-line position in the negotiations. If history is any indication, it probably will not.

Several issues must be resolved if an agreement is to be reached in Copenhagen. Indeed, countries are still arguing about what would compose a post-2012 agreement. Should negotiators come up with a decision or deal as a successor to the current Kyoto Protocol? Replace the Kyoto Protocol with a new protocol or legal treaty? Or come up with some other type of agreement? The tight timeframe, huge complexity of the negotiations and length of the negotiating text means there is a real risk that the final deal—whatever shape it takes—might not be reached in December 2009. At the very least, many additional negotiations would need to take place to elaborate agreements on the scope of market mechanisms, the nature of NAMAs, and the profile and scope of REDD and agriculture in the post-2012 regime.

Glossary

Ad Hoc Working Group on Further Commitments for Annex I Parties Under the Kyoto Protocol (AWG-KP)

This group, agreed to at COP 11 in Montreal in 2005, is discussing future commitments for industrialized countries under the Kyoto Protocol. Membership includes all countries that have ratified or approved the Kyoto Protocol. Notably, the United States is not a member of this group.

Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention (AWG-LCA)

This group, formed under the Bali Action Plan, is undertaking a dialogue to analyze approaches for long-term cooperative action to address climate change, including mitigation, adaptation, technology, and financing and investment. Membership includes all nations that have signed the UNFCCC.

Annex B countries

These are developed nations, as well as countries in Central and Eastern Europe, that committed to emission reductions at Kyoto. “Annex” refers to an appendix to the Kyoto Protocol document. Canada is one of the Annex B countries. The United States has not ratified the Kyoto Protocol.

Annex I countries

These are Organisation for Economic Co-operation and Development countries (except for Mexico and South Korea) and those making the transition to a market economy, such as Russia and the former Eastern Bloc countries, that are signatories to the UNFCCC.

anthropogenic emissions

GHG emissions that result from the activities of human beings, such as burning of fossil fuels.

Bali Action Plan

A decision of the COP 13 in Bali, Indonesia, that sets out a comprehensive process to enable the implementation of the UNFCCC through long-term cooperative action beyond 2012. The two-year process is expected to finalize a post-2012 regime by COP 15 in December 2009 in Copenhagen, Denmark.

Clean Development Mechanism (CDM)

A market-based mechanism under the Kyoto Protocol wherein a project or program of activities to mitigate climate change in a developing country can generate credits that can be used by an Annex I Party to help meet its GHG emission–reduction commitment.

Conference of the Parties (COP)

An association of 192 countries (that have ratified or approved the UNFCCC) that meets once a year to review the convention's progress.

Conference of the Parties Acting as the Meeting of the Parties (COP/MOP)

The COP also acts as the meeting of the parties to the Kyoto Protocol. This group includes 183 countries and one economic region (the European Community) that have ratified or accepted the Kyoto Protocol. The United States participates in these meetings as an observer, since it has not ratified the protocol.

International Emissions Trading

A market-based mechanism under the Kyoto Protocol that allows Annex B countries to buy and sell parts of each country's allowed emissions, which are divided into assigned amount units. This increases the allowable emissions in the recipient country and reduces those of the seller country.

greenhouse gas (GHG)

Gases that accumulate in the Earth's atmosphere and trap heat, contributing to the greenhouse effect. The six greenhouse gases covered under the Kyoto Protocol are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.

Intergovernmental Panel on Climate Change (IPCC)

A body made up of the world's leading climate experts, established in 1988 by the UNEP and the World Meteorological Organization, to assess the scientific research on climate change and its environmental and economic impacts. Most notably, at regular intervals the IPCC publishes assessment reports on the latest knowledge on climate change.

joint implementation (JI)

An international project, involving joint action by Annex B countries, that results in a real, measurable reduction in net GHG emissions in a host country.

Kyoto Protocol

An international agreement, linked to the UNFCCC, that sets binding targets for 37 industrialized countries and the EC for reducing GHG emissions. These targets amount to an average of 5% from 1990 levels over the five-year period from 2008 through 2012. The protocol was adopted in 1997 and entered into force in February 2005.

Land Use, Land-Use Change and Forestry (LULUCF)

A GHG sector that covers emissions and removals of GHGs resulting from land use, land-use change and forestry activities that result from human activities. Examples of activities in the land-use sector include increasing removal and storage of carbon from the atmosphere by planting trees or introducing reduced-tillage agricultural practices, or reducing emissions by curbing deforestation.

United Nations Framework Convention on Climate Change (UNFCCC)

The agreement signed by 192 countries at the Earth Summit in Rio in June 1992 under which climate change is monitored and addressed globally.

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