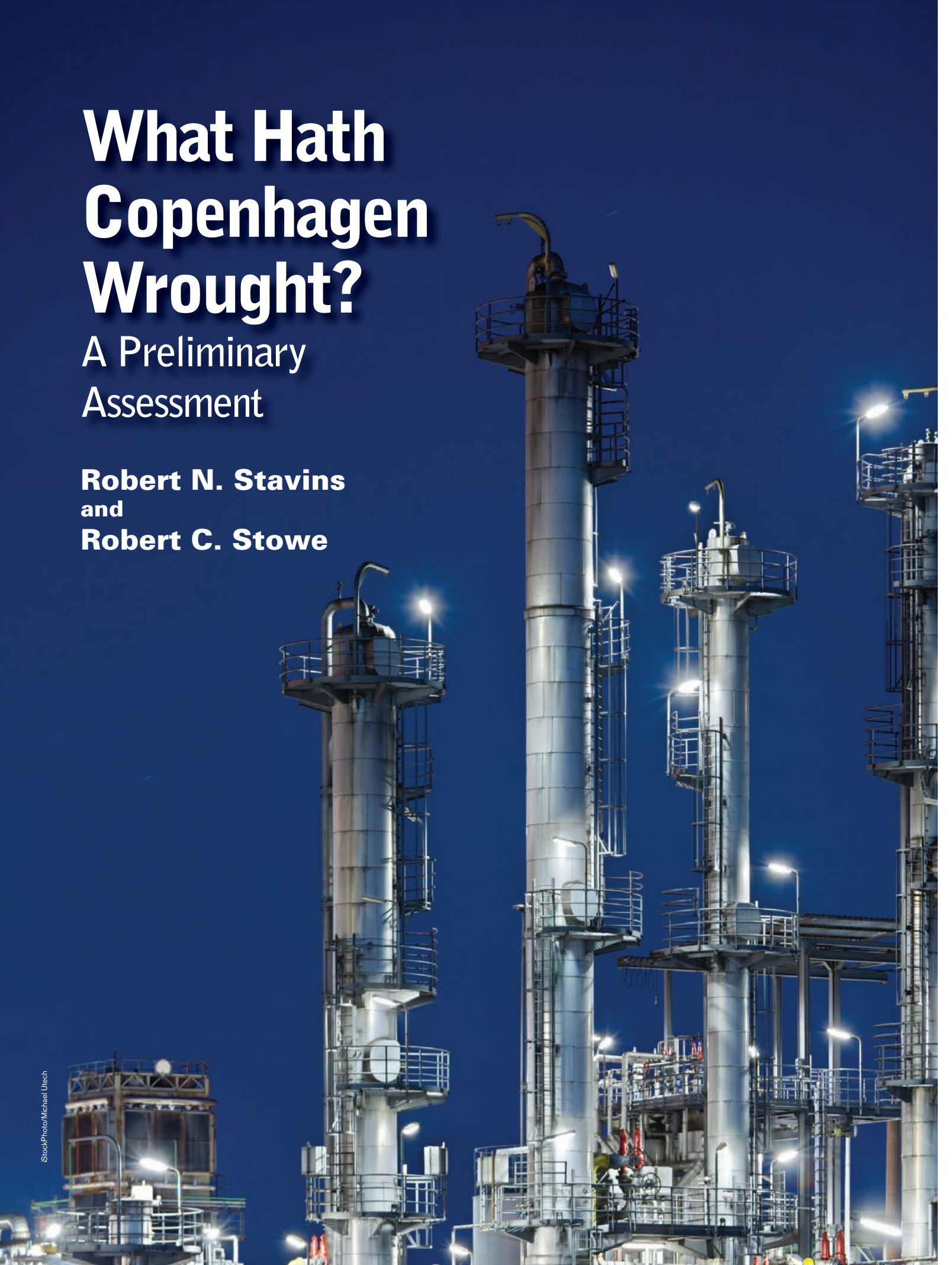


What Hath Copenhagen Wrought?

A Preliminary
Assessment

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After years of preparation, the Fifteenth Conference of the Parties (COP-15) of the United Nations Framework Convention on Climate Change (UNFCCC) commenced on December 7, 2009, in Copenhagen, Denmark, and adjourned some two weeks later on December 19, after a raucous all-night session. During the last 24 hours of the conference, a small group of leading heads of state and government negotiated directly, to a degree unprecedented in recent history.

Through a series of meetings among U.S. President Barack Obama, Chinese Premier Wen Jiabao, Indian Prime Minister Manmohan Singh, Brazilian President Luiz Inácio Lula da Silva, and South African President Jacob Zuma, an agreement emerged that was to become the Copenhagen Accord, a three-page document with two appendices, each consisting of one blank table. Industrialized (Annex I) countries¹ that wished to participate were invited to submit proposed economy-wide, quantified emissions-reduction targets for inclusion in the Accord's Appendix I, and developing (non-Annex I) countries were invited to submit "nationally appropriate mitigation actions" for inclusion in Appendix II.²

By early March 2010, there were 14 submissions from industrialized countries (including one from the EU-27), and 30 submissions from developing countries. An additional 39 countries had formally "associated" themselves with the Accord or were supportive and would presumably submit targets or actions when they completed their decision-making processes. Thus, a total of 109 parties (including the EU-27 separately) had formally expressed support for the Accord (out of 192 parties to the convention). These included the top-12 emitters, which themselves accounted for more than 70 percent of GHG emissions in 2005.³

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A powerplant in Iceland. The accord states that "deep cuts in global emissions are required" to stabilize greenhouse gas concentrations such that global average temperature increases by less than 2°C.

on a new international agreement on climate change to come into force when the Kyoto Protocol's first commitment period ends in 2012. Clearly the Copenhagen Accord is neither sufficiently detailed nor is its legal status sufficiently resolved to fill such a role. Nevertheless, it is at least conceivable that the Accord will evolve into a subsequent agreement or arrangement that is sufficiently robust to motivate meaningful action on climate change. While the Accord is a nonbinding, political agreement, much of the world apparently considers it sufficiently important to merit participation in one way or another. We describe the Accord's architecture below, as well as issues that remain to be addressed.

The Architecture of the Copenhagen Accord

The fundamental architecture of the Copenhagen Accord is one that had been proposed and described prior to COP-15 as "A Portfolio of Domestic Commitments."⁴ Under such an approach, each nation commits and registers to abide by its domestic climate commitments, whether those are in the form of laws, regulations, or multiyear development plans. This is similar to the "schedule approach" proposed by the Australian government in spring 2009 and implicitly draws upon proposals by the Republic of Korea and others for a registry of national actions to mitigate emissions of greenhouse gases (GHGs).⁵

The portfolio-of-domestic-commitments approach has the virtue of relying on domestic enforcement mechanisms, which, unlike their international counterparts, actually exist. It is nearly impossible in a world of sovereign states to enforce an international agreement, even one that is "legally binding" among countries that have ratified it. The submissions to the Copenhagen Accord are not all currently embodied in national law. However, given the fundamental design element of a completely bottom-up set of individual country submis-

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sions, with no preordained global cap, many or most UNFCCC member states can be expected to submit what they believe they can actually attain.

The Copenhagen Accord establishes a framework for addressing two important deficiencies in the Kyoto Protocol: expanding the coalition of the willing and extending the timeframe of action. First, the Accord takes an initial step toward dissolving the inflexible and highly counterproductive dichotomy between industrialized and developing countries that arises from the Kyoto interpretation of the UNFCCC principle of "common but differentiated responsibilities." Annex I parties have binding, economy-wide, emissions-reduction targets, and the large emerging economies (like all developing, non-Annex I countries) have no obligations whatsoever. The Accord blurs this distinction by requiring commitments of developing countries; it does not eliminate the distinction because these obligations are of a different type.

Second, the Accord covers a longer time period than the Kyoto Protocol: Any commitments would be through 2020, and the Accord refers to 2050 targets. This is significant because the stock of greenhouse gases in the atmosphere builds up over a long period of time, and long-term planning for investment in capital stock is essential for implementing any policy to reduce emissions significantly.

The Copenhagen Accord: Assessment of Key Provisions

Almost by definition, the Accord represents the best agreement that could be achieved in Copenhagen, given the political forces at play. Indeed, were it

not for the spirited—and as suggested above, quite unprecedented—direct intervention by key national leaders, there would have been no significant outcome from the Copenhagen negotiations. That said, it is important to take a critical look at the Accord, item by item. (The numbering below is our own, not that of the Accord itself.)

Temperature Target and Emissions Reductions

The Accord states that, to achieve the convention's goal of preventing "dangerous anthropogenic interference with the climate system," "deep cuts in global emissions are required" to stabilize greenhouse-gas concentrations such that the global average temperature increases by less than 2°C.

Assessment: This temperature target is consistent with recent recommendations from the natural-science community. Both the temperature target and deep cuts in global emissions are aspirational goals, however. What the Accord or its successor agreement(s) will actually measure are the targets and actions submitted by individual nations. An important question is whether the submissions in aggregate will result in adequate emissions reductions to keep global average temperature increases within the specified bound. The answer is that the accumulated submissions of targets and actions will *not*—on their own—be sufficient to meet the goal.⁶

Adaptation

Action and cooperation is required, particularly in the "least developed countries, small island developing States and Africa." Developed countries commit to provide "predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action..."

Assessment: The added attention to adaptation is a significant and valuable departure from the Kyoto Protocol. Targeting adaptation funds to the least developed countries, whose contributions to emissions are negligible, is sensible.

“Graduation”

The Accord importantly provides specific opportunities for commitments by both Annex I and non-Annex I countries, in terms of quantitative emission targets and specified actions, respectively. But the Accord makes no provisions for countries to move from non-Annex I to Annex I (actions-to-targets) status.

Assessment: Ideally, a new climate regime would provide for a continuous spectrum of national circumstances and obligations listed in the same appendix table, or for a formula that would generate differentiated national targets depending on the respective countries’ economic circumstances.⁷ If such a continuous spectrum of commitments or formulaic approaches is not politically feasible, then an explicit mechanism is needed for countries to transition from one appendix to the other. Korea and Mexico—both of which, to their credit, have participated creatively in the Copenhagen process—joined the OECD six months after Kyoto, but they remain non-Annex I countries. Indeed, 50 non-Annex I countries now have greater income per capita than the poorest of the Annex I countries.

Measurement, Reporting, and Verification

There are three relevant regimes in the Accord. First, emissions reductions (and financing to developing countries) by Annex I countries will be subject to international guidelines, which “will ensure that accounting of such targets and finance is rigorous, robust and transparent.” Second, non-Annex I countries undertaking actions with *no* external financing “will be subject to their domestic measurement, reporting and verification, the results of which will be reported through their [N]ational [C]ommunications every two years... with provisions for international consultations and analysis under clearly defined guidelines that will ensure that national sovereignty is respected.” Third, non-Annex I countries undertak-



Logging in Amazon Rainforest.

ing actions with external financing “will be recorded in a registry along with relevant technology, finance and capacity building support” and “will be subject to international [MRV*] in accordance with guidelines adopted by the Conference of the Parties.”

Assessment: This was an exceptionally contentious issue in the Copenhagen negotiations, with the U.S. delegation demanding “transparency” and China strenuously resisting in order to protect its national sovereignty. The compromise language for non-Annex I countries with no external financing was worked out in the last hours of COP-15 and appears reasonable on its face. However, if COP-15 is any guide, it will be difficult to define “guidelines” for “international consultation” that are acceptable to all parties—and their domestic constituencies. It is simply too soon to say whether the compromises achieved in Copenhagen on the subject of measurement, reporting, and verification will lead to a set of credible commitments and subsequent actions by the key nations of the world.

Forestry

The Accord recognizes “the crucial role of reducing emission from defor-

estation and forest degradation” and mandates the establishment of a financial mechanism for developed-country funds for this purpose.

Assessment: The lack of meaningful attention to slowing deforestation was a very significant deficiency of the Kyoto Protocol and its Clean Development Mechanism (CDM), which provides project-based opportunities for emissions reduction in developing countries.⁸ Because the least costly way of sequestering carbon from the atmosphere is to slow the rate of or prevent deforestation, the omission of this option from Kyoto and the CDM was a problem very much in need of correction.

It is reasonable to anticipate that a subsequent, more detailed version of the Accord will contain strong forestry and land-use-change components because a separate set of ongoing UNFCCC forestry negotiations progressed quite far in this regard (prior to and during COP-15).⁹ In fact, if the Conference had not been so occupied with the Accord in its final days, it is possible that a separate formal agreement on forestry and land-use change might have been reached.

Finance

The Accord quantifies targets for both near-term and longer-term “scaled up, new and additional, predictable

*measureable, reportable, and verifiable

and adequate funding” flows from developed to developing countries. This funding would “enable and support enhanced action on mitigation, including substantial finance to reduce emissions from deforestation and forest degradation ... adaptation, technology development and transfer and capacity-building...” The Accord specifies \$30 billion for the three-year period 2010–12, to be divided equally between adaptation and mitigation. It then identifies a “goal” of \$100 billion per year starting in 2020.

Assessment: Identifying an acceptable approach to financial burden sharing has been and continues to be a major challenge. Two features of global climate change make the burden-sharing dialogue particularly contentious. First, climate change is a global commons problem, and all major emitters must participate in an emissions-reduction regime for it to be truly effective. Second, the largest emitters of the past—the industrialized nations—are not the largest emitters of the future; the large emerging economies of the developing world most likely are.

The U.S. Government, represented by Secretary of State Hillary Clinton, broke the financing logjam on December 17, when she announced at COP-15 that the United States would participate in the approach later specified in the

Accord. However, a great deal of negotiation—and careful policy implementation—will be required to develop and manage the institutions that administer the two funds. Success cannot, as of yet, be predicted.

The Accord notes that markets (private-sector financing) will be targeted to mitigation and implies that adaptation funding will be primarily government-to-government. This makes sense: There is little incentive for the private sector to finance adaptation, and the private sector will be absolutely necessary for mitigation financing. It is inconceivable that the governments of the industrialized world would come up with sufficient foreign aid to satisfy these demands for financial transfers, but governments can—through the right domestic and international policy arrangements—provide key incentives for the private sector to provide the needed finance through foreign direct investments.

Furthermore, such private finance stands a much greater chance than government aid of being efficiently employed, that is, targeted to reducing emissions, rather than spent by poor nations on other (possibly meritorious) purposes.

The Accord states that markets should be used to achieve *cost-effective* mitigation actions. To advance this ob-

jective, it is important that the Accord or its successor facilitate or at least not discourage voluntary linkage of national and multinational cap-and-trade systems that are emerging throughout the industrialized world as the favored domestic approach to reducing CO₂ and other greenhouse-gas emissions.¹⁰ Linkage can increase liquidity and enhance cost-effectiveness.

Cap-and-trade systems with otherwise incongruent design elements can be linked through a common emission-reduction-credit system; the CDM is by far the most important existing system. The CDM, as currently constituted, cannot live up to this promise, but with appropriate reforms, there is significant potential.¹¹

Although both governments and businesses in all jurisdictions where cap-and-trade systems have been discussed, planned, or implemented have recognized the importance of system linkage, it will be up to international negotiators to make sure future climate regimes facilitate, not reduce, progress.

Evaluation

Evaluation of the Accord’s implementation is to be completed by 2015, including consideration of strengthening the long-term goal as the science indicates.

Assessment: Depending upon when the Accord is implemented, completing an assessment by 2015 might or might not be reasonable. An option to strengthen the long-term goals of the Accord might be sensible, but this option should note more generally that the long-term goal should be “adjusted as the science indicates,” so as not to prejudge what future scientific research may reveal.

Institutional Venue and the Path Forward

The Copenhagen Accord was the most visible outcome of COP-15, but in the long term, it is quite possible that another outcome will prove to be



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White House official photograph

During the last 24 hours of the conference, a small group of leading heads of state and government negotiated directly, to a degree unprecedented in recent history.

equally or more consequential: The decreased credibility of the UNFCCC as the central institutional venue for international climate policy negotiation and implementation.

The UNFCCC requires consensus (adoption by virtue of no objection) or unanimity (all 192 members voting in favor). Consensus failed to be achieved at COP-15. Six countries—none of them major emitters—objected to the Accord,¹² and thus it was “noted” by the conference, and not “adopted.” It is extremely difficult to obtain consensus among this hugely disparate group of nations except on trivial matters.

The UNFCCC—and the United Nations culture more generally—tend to polarize many discussions into the developed world versus the developing world. This is troubling, because the world is much more diverse than such

a dichotomous distinction would suggest. Clearly, emerging economies such as China, India, Brazil, Korea, Mexico, and South Africa have more in common—along some key economic dimensions—with some countries in the so-called developed world than they do with the poorest developing countries, such as those of sub-Saharan Africa.

The Major Economies Forum on Energy and Climate, and the G-20, can be effective venues for discussion and perhaps could be effective venues for building concurrence on the outlines of a new climate regime that might be extended to the UNFCCC. Their members represent 75–80 percent of the world’s emissions and hail from both the developing and developed worlds, and thus their views carry some legitimacy.¹³ The members of neither group, however, construe their mission as negotiating

formal agreements. It is unlikely that the developing-country members would do so, and thus exacerbate tensions within the G-77—which they have an interest in maintaining intact.

There are other multilateral negotiations that could be convened, as well as bilateral approaches, including, of course, ongoing talks between China and the United States. In the end, though, it is likely that formal discussions on a new climate agreement—or set of agreements—will continue within the UNFCCC. Why? First, the UNFCCC has a very large constituency of support, including at a minimum most, if not all, of the G-77 (which actually numbers 130 countries). Thus, the UNFCCC has significant international legitimacy and is potentially key for implementation, no matter what the venue may be for negotiation. Second,

the Kyoto Protocol remains in effect through the end of 2012, and the CDM is unlikely to be replaced whole-cloth. Biennial climate-reporting mechanisms established in the convention (to which, unlike Kyoto, the United States is a party) are incorporated into the Copenhagen Accord.

Assuming that the UNFCCC remains the primary venue for expanding the outline of the deal developed in the Copenhagen Accord, the essential challenge confronting negotiators over the next year will be to integrate or harmonize the Accord with the ongoing substantive discussions in the two “Ad-hoc Working Groups” (AWGs) set up at COP-13 in Bali, Indonesia: One on the future of the Kyoto Protocol (KP), the other on “Long-Term Cooperative Action” (LCA). Complex interests and relationships have essentially deadlocked these two forums.

The climate change policy process is best viewed as a marathon, not a sprint. The Copenhagen Accord—depending upon details yet to be worked

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out—could turn out to be a sound foundation for a portfolio of domestic commitments, which could in turn be an effective bridge to a longer-term arrangement among the countries of the world. If this happens, we may look back upon Copenhagen as an important moment—both because global leaders took the reins and brought the negotiations to a fruitful conclusion, and because the

foundation was laid for a broad-based coalition of the willing to effectively address the threat of global climate change. Only time will tell.

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Notes

1. The 1997 Kyoto Protocol list of the industrialized countries and the emerging market economies of Central and Eastern Europe. The precise reference should be to “Annex B” of the Kyoto Protocol; “Annex I” refers to the UNFCCC document of 1992. But the two lists overlap almost completely, and “Annex I” is universally used to refer to both.

2. For the text of the Accord, see: <http://unfccc.int/resource/docs/2009/cop15/eng/107.pdf>.

3. Copenhagen Accord submissions data from the UNFCCC and the U.S. Climate Action Network. Emissions data from the World Resources Institute Climate Analysis Indicators Tool; includes land-use changes. These top 12 include the EU-27 but no member states separately. The 17 members of the Major Economies Forum on Energy and Climate (MEF) include these 12, plus South Africa, France, Germany, Italy, and the United Kingdom are MEF members, separately from the EU.

4. <http://belfercenter.ksg.harvard.edu/publication/19637>.

5. For a presentation of a comprehensive and potentially effective architecture for global climate policy, see the Harvard Project’s Discussion Paper by Olmstead and Stavins: <http://belfercenter.ksg.harvard.edu/publication/19553>.

6. For example, the World Resources Institute (WRI). See: <http://www.wri.org/stories/2010/02/adding-countries-emission-reduction-targets>.

7. For an important realization of such an ideal, see Bosetti and Frankel’s Harvard Project Discussion Paper: <http://belfercenter.ksg.harvard.edu/publication/19568>.

8. The CDM has approved a small number of projects involving afforestation or reforestation, as contrasted with avoided deforestation, which is more difficult to implement on a project basis. The Harvard Project has addressed these and related issues in its research: <http://belfercenter.ksg.harvard.edu/publication/18634>.

9. See UNFCCC reports on COP-15: <http://unfccc.int/resource/docs/2009/awg10/eng/17.pdf>, pp. 18-32 (AWG-KP report on COP-15, Jan. 28, 2010; pp. 34-37 and elsewhere (AWG-LCA report on COP-15, Feb. 5, 2010).

10. See Harvard Project Discussion Paper: <http://belfercenter.ksg.harvard.edu/publication/18580>.

11. See the Harvard Project’s Issue Brief on CDM reform: <http://belfercenter.ksg.harvard.edu/publication/19523>.

12. Bolivia, Cuba, Nicaragua, Sudan, Tuvalu, and Venezuela.

13. The G-20 turned its attention to climate change policy, from a nearly exclusive focus on finance, in its Pittsburgh meeting in September 2009.



China, one of the biggest emitters of GHGs, was constrained in its position at Copenhagen by domestic pressures surrounding economic growth.