



International Climate Change: What to Expect at the Durban Conference, December 2011

Jane A. Leggett

Specialist in Energy and Environmental Policy

November 22, 2011

Congressional Research Service

7-5700

www.crs.gov

R42101

CRS Report for Congress

Prepared for Members and Committees of Congress

Summary

Delegations from more than 190 countries and regions meet from November 28 to December 9, 2011, in Durban, South Africa, to continue discussions of how to address climate change under the United Nations Framework Convention on Climate Change (UNFCCC). The year 2012 will mark both the 20th anniversary of the opening for signature of the UNFCCC in Rio de Janeiro in 1992 and the end of the first “commitment period” (2008-2012) of the UNFCCC’s subsidiary Kyoto Protocol.

In 2010, the Conference of the Parties (COP) to the UNFCCC adopted a set of decisions referred to as the “Cancun Agreements.” These embody pledges to abate greenhouse gas (GHG) emissions made by all major emitting Parties; reporting and review systems to ensure “transparency” of implementation; a new Green Climate Fund and a Technology Mechanism; and restatement of pledges by the wealthiest countries to mobilize financing for adaptation, mitigation, technology, and capacity-building: pledges approaching \$30 billion during 2010-2012, and a goal of approaching \$100 billion annually by 2020. Parties agreed that funding would come from public and private, bilateral and multilateral, and alternative sources. The most vulnerable developing countries have priority for the 2010-2012 funds.

Parties meeting in Durban, South Africa, will seek agreements that would clarify and carry out the Cancun Agreements. The dialogues particularly regard any second commitment period of the Kyoto Protocol, establishment of the Green Climate Fund and Technology Mechanism; and guidelines for the reporting and review mechanisms.

This report provides context for the discussions that will ensue in the Durban conference, then outlines the main issues and expectations for decisions by the Parties. Many see agreement on a new commitment period for GHG abatement under the Kyoto Protocol as key to almost all other decisions. Notably, delegations from China, India, and some other middle-income countries say they will not discuss their own possible GHG abatement commitments until the highest-income “Annex I” Parties meet their existing commitments and sign up to further reductions under the Kyoto Protocol. On the other hand, Canada, Japan, and Russia have stated they will not offer GHG reductions except in an agreement that includes legally binding commitments from all major emitters (including China, the United States, and others). The United States, which declined to ratify the Kyoto Protocol, has no quantitative and binding GHG commitments. The absence of commitments from the top three global GHG emitters (China, the United States, and India) is a matter of consternation among many delegations.

In Durban, the Parties may agree on rules to establish the Climate Green Fund, the Standing Committee on Finance, the Adaptation Committee, the Technology Committee, and Clean Technology Centre, and additional decisions to promote mitigation of greenhouse gases and adaptation to impacts of climate change. A proposal exists, but seems unlikely to be adopted, to set a mandate to negotiate by 2015 a new global agreement that would take effect by 2020.

Contents

The Context of the Durban Climate Change Negotiations	1
Kyoto Protocol Track.....	4
Extension of the Kyoto Protocol	4
Long-Term Cooperation Track	5
Two Tracks or Convergence into One Agreement.....	5
Strengthening GHG Reductions	6
Reporting and Reviews.....	6
Reduced Emissions from Deforestation and Forest Degradation, Plus Forest Conservation (REDD+).....	7
Finance	8
Technology Mechanism.....	9
Adaptation	9
2013-2015 Periodic Review	10

Contacts

Author Contact Information.....	10
---------------------------------	----

The Context of the Durban Climate Change Negotiations

Delegations from more than 190 countries and regions meet from November 28 to December 9, 2011, in Durban, South Africa, to continue discussions of how to address climate change under the United Nations Framework Convention on Climate Change (UNFCCC). The year 2012 will mark both the 20th anniversary of the opening for signature of the UNFCCC (in Rio de Janeiro, 1992)¹ and the end of the first “commitment period” (2008-2012) of the UNFCCC’s subsidiary Kyoto Protocol.²

The preceding 20 years have witnessed expanding evidence of many aspects of human-related, greenhouse gas (GHG)-induced climate change. However, many questions regarding the magnitude, timing, and local characteristics of natural and human-induced climate change will likely persist for decades.³ A large majority of countries now consider climate change to be a primary impetus to restructuring their energy sectors—and economies more broadly—toward more efficient and less climate-vulnerable models. The 1992 UNFCCC treaty was formulated as a framework to facilitate mutual movement of all countries in this process, to increase effectiveness, and to ameliorate possible adverse effects on competitiveness.

The UNFCCC was also created to help avoid a problem of “free riders” (in which some benefit by the efforts of others while not taking comparable actions themselves). In sharing responsibilities for actions, Parties, including the United States, committed to “common but differentiated” responsibilities under the UNFCCC. In the Kyoto Protocol in 1997, the highest-income countries (generally called *Annex I* Parties) adopted commitments to reduce their GHG emissions by, on average, 5% below their 1990 levels during the “first commitment period” of 2008-2012. The Kyoto Protocol was considered a first step, led by the wealthiest countries, in a process that would eventually include all countries. As such, the low-income, major emitting countries, including China and India, did not take on GHG obligations under the Kyoto Protocol. Partly because of this, the United States declined to ratify the Kyoto Protocol and is not a Party to it.⁴

From 1990 to 2009, the greenhouse gas emissions of the Annex I Parties declined by 11.5%, not counting the emissions or sequestration associated with land use and forestry changes (LULUCF); including LULUCF, the GHG decrease was 17.6% from 1990 to 2009.⁵ During this

¹ The 1992 UNFCCC set the multilateral objective of stabilizing greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous human-induced interference with the Earth’s climate system. As a “framework convention,” it includes certain general (not quantitative) obligations for all Parties and provides an “umbrella” for further amendments and subsidiary agreements.

² For more background on the history and issues in the climate change negotiations, see CRS Report R40001, *A U.S.-Centric Chronology of the International Climate Change Negotiations*, by Jane A. Leggett.

³ CRS Report RL34266, *Climate Change: Science Highlights*, by Jane A. Leggett, summarizes the main mechanisms, evidence, and uncertainties.

⁴ The Clinton Administration signed the Kyoto Protocol but did not submit it to the Senate for consent to its ratification. The Bush Administration, in 2001, announced that the United States would not become Party to the treaty, in part because low-income but large-emitting countries like China and India were exempted from commitments under the Kyoto Protocol.

⁵ UNFCCC Subsidiary Body for Implementation. National greenhouse gas inventory data for the period 1990-2009. Bonn, Germany, November 16, 2011, at <http://unfccc.int/resource/docs/2011/sbi/eng/09.pdf>.

period, the GHG emissions of the United States grew by 7.2% excluding LULUCF, or by 5.6% including LULUCF. Globally, GHG emissions rose by an estimated 29% from 1990 to 2008,⁶ although greater uncertainties regarding non-CO2 emissions and LULUCF for the rest of the world make estimates less complete and precise. (See the **Text Box** below for information about actions a few countries are taking to reduce their GHG emissions.)

Parties to the Kyoto Protocol were due to conclude negotiations for a second commitment period by 2007; unable to do so, Parties agreed to a two-track negotiating mandate: one to extend the Kyoto Protocol, and the other to include all Parties (including the United States), called the Bali Action Plan. Still, the Bali Action Plan entailed bifurcation in the anticipated commitments for “developed” versus “developing” countries—a persistent division that contributed to missing the deadline for negotiating a new agreement in Copenhagen in 2009 (the “Copenhagen Accord”).⁷ The terms of the Copenhagen Accord were reiterated and adopted in the Cancun Agreements in 2010.

This disagreement continues to impede negotiations. Although some observers hope that the Durban negotiations will overcome this hurdle by producing a mandate for quantitative, legally binding GHG obligations for all countries, others wonder whether the UNFCCC process will be able to maintain momentum even on narrower objectives, such as rules for new processes and mechanisms for finance, technology deployment, and adaptation.

Participants in the climate change negotiations hold a wide spectrum of expectations for the Durban conference. For many low-income nations and environmental groups, the key ambitions for the Durban meeting are to find agreement on

1. a second commitment period under the Kyoto Protocol with stronger GHG reduction commitments from the Annex I Parties;
2. the legal form of any new agreements, including proposals for legally binding commitments to GHG reductions to take effect by 2020;
3. design of the new Green Climate Fund, and materialization of funds during the “fast-start” period of 2010-2012, provisions for the unreferenced period of 2013-2020, and the pledged mobilization of \$100 billion annually by 2020;
4. design of the new Technology Mechanism; and
5. evolution of the Adaptation Committee.

At the other end of the spectrum of views, there are a few delegations (e.g., Saudi Arabia, Venezuela) that may seem content with no resolutions of issues, or even collapse of the process.

⁶ European Commission. “Total GHG Emissions (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆) in 1990, 2000, 2005 and 2008.” Emission Database for Global Atmospheric Research (EDGAR) release version 4.2, extracted November 22, 2011.

⁷ The Copenhagen conference was beset by strong differences, but may have marked a turning point: almost all countries agreed to discuss commitments by all countries in a single statement, the “Copenhagen Accord.” For a variety of reasons, particularly objections to the closed process by which the Copenhagen Accord was negotiated, it was noted but never adopted as a formal decision of the Parties in 2009.

What Are Other Countries Doing?

Many countries have established policies that are reducing greenhouse gas (GHG) emissions below their “business-as-usual” levels; in some countries, policies are achieving absolute emission reductions. Below are highlights of pledges and actions by selected UNFCCC Parties.

The **European Union (EU)** has enacted laws requiring a 20% reduction of GHG emissions below 1990 levels by 2020, and the possibility of moving the reduction to 30% if other major emitters make comparable commitments. As principal policy instruments to meet its targets, the EU has established an emissions trading system (ETS) that caps emissions from electricity generation and many industrial sectors, set motor vehicle efficiency standards to reduce emissions from cars and trucks, and required minimum standards for renewable energy generation by 2020.

The **United Kingdom (UK)** has decided to reduce its GHG emissions to 50% below 1990 levels by 2025. The Secretary of Energy and Climate reasoned, “It will establish our competitive advantage in the most rapidly growing sectors of the world economy, generate jobs and export opportunities in these sectors, maintain energy security and protect our economy from oil price volatility.” The decision, however, leaves flexibility to modify the target if other EU countries do not establish comparably ambitious GHG caps.⁸ The target will be accompanied by “a package of measures to be announced by the end of the year [2012] to help energy intensive industries adjust to the low-carbon industrial transformation while remaining competitive.” A wide spectrum of policymakers across parties agreed to this policy, with the view that long-term and stable policies would be most conducive to business investment in the country.

Australia enacted Clean Energy Future legislation, which includes a “carbon price” of about US\$23 per metric ton of carbon emissions beginning July 1, 2012, compensated by reductions in household taxes, and incentives to improve energy efficiency and deploy renewable energy technologies. It expects the package of policies to bring Australian GHG emissions to 5% below year 2000 emissions by 2020, or about 23% below “business as usual” projections.⁹

China has pledged to improve its GHG intensity—the amount of emissions per unit of economic activity—by 40%-45% from 2005 to 2020, setting an interim target in the 12th 5-Year Plan (2011-2015) of improving GHG intensity by 17% by 2015. These policies follow China’s narrowly missed target of improving its energy intensity (energy per unit of GDP) by 20% from 2005-2010. Even if all its targets are achieved, China’s current policies are likely to continue to allow an absolute increase in its GHG emissions until around 2030, and China will remain the largest emitter of GHG globally. China aims to achieve its targets with a great number of policy instruments, including continued mandatory plant closures, incentives to install renewable energy, raising energy prices, and a pilot carbon cap-and-trade program. China also has set strict emission standards on motor vehicles and set taxes to encourage purchase of smaller and more efficient vehicles. The government has also established incentives for energy conservation companies, with reported expansion of employment in the sector increasing from 16,000 in 2005 to 180,000 in 2010. It also has set efficiency standards for buildings and products.

India has pledged to reduce its GHG intensity by 20%-25% below 2005 levels by 2020, though the government excludes the agricultural sector from its pledge. The national government has introduced a small carbon fee (about US\$1 per ton of coal) to finance a National Clean Energy Fund that will, in turn, finance research and new energy technologies. India has set a target for 40-55 GW of renewable energy generating capacity by 2022. The government has established eight “missions,” such as a solar energy mission, that are intended to help meet India’s pledge, though the government has not provided quantitative information on its baselines projections or how its measures would lead to meeting its pledge.

Some 30 low-income nations making up the “**Climate Vulnerable Forum**,” led by the Maldives, released a declaration in November 2011, expressing their “resolve to demonstrate moral leadership by committing to a low-carbon development path on a voluntary basis within the limitations of our respective capabilities, which are to a large extent externally determined by the availability of appropriate financial and technological support, and call on all other nations to follow this moral leadership.”¹⁰ Bangladesh, for example, includes a variety of GHG mitigation measures in its national plan of action, including raising energy efficiency, exploring for natural gas as an alternative to coal, using “clean coal technology,” exploring renewable energy resources, reducing methane emissions from agriculture and waste, expanding reforestation, and additional measures. The Maldives has pledged to become carbon neutral by 2019, by investing in renewable energy. Ethiopia has planted more than 1 billion trees to help remove carbon from the atmosphere, and has invested in efficient light bulbs, wind power, and solar energy to improve access to electricity while minimizing emissions.

⁸ http://www.decc.gov.uk/en/content/cms/news/cb_oms/cb_oms.aspx.

⁹ Department of Climate Change and Energy Efficiency, “Reducing Australia’s emissions,” at <http://www.climatechange.gov.au/government/reduce.aspx>.

¹⁰ “Dhaka Ministerial Declaration of the Climate Vulnerable Forum.” November 14, 2011.

Arguably, the U.S. delegation goes to the Durban negotiations with compromised credibility: the United States' lack of consensus on domestic policy has impaired its ability to negotiate for unambiguous commitments or to assure others that any negotiated texts will be accepted by the Senate. After signing the Kyoto Protocol, the United States never became a Party to it. The U.S. Congress has taken up, but never enacted, legislation specifically addressing mitigation of U.S. GHG emissions, and has not fully funded requests by Presidents Clinton, (George W.) Bush, or Obama to support their pledges of financial support for deployment of low-emitting technology and other assistance to low-income countries.

Congress remains divided over the stance the United States should take in the international climate change negotiations. The breadth of views may be characterized by contrasting two recent remarks by Members: On the one hand, there is the call from Representative Bobby L. Rush: "Ambitious and urgent action to help poor countries and communities confront climate change and to reduce greenhouse gas emissions here in the [United States] is both a moral imperative and in our national interest."¹¹ On the other hand, Senator James M. Inhofe recently wrote to Secretary of State Hilary Clinton that "there is no chance of any climate treaty being ratified by the United States Senate in the foreseeable future."¹² Many international stakeholders doubt the policy stasis of the United States can be overcome in the next few years; instead of looking to U.S. leadership, some observers now counsel the U.S. delegation to "get out of the way."¹³

In this context of strongly held differences within the United States, and between the United States and most other countries, the Durban conference will tackle questions of the future of the Kyoto Protocol and the possibility of a mandate for future quantitative, binding GHG obligations for all Parties. Some observers have noted that, despite entrenched negotiating positions, the meetings throughout 2011 have had a positive atmosphere, which may portend well for decisions in Durban. As noted earlier, the Durban negotiations will continue on two tracks, one under the Kyoto Protocol and one under the broader UNFCCC. In each track, key topics for negotiation in Durban are summarized in the remainder of this report.

Kyoto Protocol Track

Extension of the Kyoto Protocol

The first commitment period of the Kyoto Protocol, 2008-2012, expires at the end of 2012. Parties to the Protocol have been unable as yet to agree on the terms of any subsequent commitment period, and many are anxious to avoid a gap between periods or the setting aside of the protocol and of the rules and institutions established by it.

To most experts, the Kyoto Protocol has been important not so much because of the GHG reductions it was intended to achieve, but more because it was the first step in launching a process

¹¹ Rush, Rep. Bobby L. "Dear Colleague: Support a Just and Ambitious US Position at the United Nations Framework Convention on Climate Change." Circulated November 16, 2011.

¹² Inhofe, Senator James M. Letter to the Honorable Hillary Clinton, Secretary of State. November 14, 2011.

¹³ This phrase was used in the Bali negotiations in 2007 (http://www.youtube.com/watch?v=C1fwrWc-g_A), and has re-emerged regarding negotiations in which the U.S. delegation is unlikely either to agree to terms on which it cannot deliver Senate consent, or to withdraw from the discussions to allow consensus among other parties.

and establishing formal mechanisms for setting targets, monitoring and verifying Parties' performance, minimizing costs through international emissions trading mechanisms, and other infrastructural achievements.

Most countries are anxious to continue the Kyoto Protocol, in part to retain the emissions trading mechanisms that it established: "emissions trading" and "Joint Implementation" among Parties with binding GHG targets, and the Clean Development Mechanism (CDM) for generating "certified emission reductions" (CERs) with projects in Parties without targets that can be sold to Parties with targets to help minimize their GHG abatement costs.

A minority of Parties are less interested in sustaining efforts under the Kyoto Protocol. Canada, Japan, and Russia have said they will not offer further GHG reduction commitments in an instrument that does not engage all major emitters, specifically the United States, China, India and Brazil. A common concern about the Kyoto Protocol is the exemption from quantitative GHG reduction commitments by middle-income Parties and, more broadly, the bipolar distinction between "developed" and "developing" country parties.

The European Union has said it would agree to another commitment period under the Kyoto Protocol but would require a clear "road map" to agreements that would include GHG obligations for all major emitting Parties. Australia and Norway have launched a proposal to draw new Parties into commitments: binding emissions caps for the Annex I Parties and binding commitments to GHG abatement actions by the non-Annex I Parties by 2015.

Other concerns about the Kyoto Protocol, and the focus of proposals to improve it, are that some of the rules and procedures established under the Kyoto Protocol have proven to be either overly constraining, in the views of some, or unacceptably inefficient.¹⁴ Also, some rules regarding what may count as emission reductions or offsets remain unresolved, such as whether and how to account for many emissions and carbon uptake associated with land use and forest management. Another issue is whether unused emission allowances from the first commitment period may be carried over into subsequent periods.

Long-Term Cooperation Track

Two Tracks or Convergence into One Agreement

The Ad Hoc Working Group on Long-Term Cooperation (AWG-LCA) continues its work but remains divided over whether it should maintain the distinction among Parties in two groups: developed and developing country Parties, or whether "common but differentiated" commitments could be achieved within a single framework. Brazil, South Africa, India, and China (the so-called BASIC countries) seek to follow the terms of the 2007 "Bali Action Plan" that divides the world into developed and developing nations. Some delegations may not support any new

¹⁴ An example of a mechanism criticized for its inefficiency is the Clean Development Mechanism (CDM), set up to facilitate trading of "certified emissions reductions" generated by projects in low-income countries). Some considered that emissions trading between Parties with and without emissions caps should be phased out as all countries "graduate" to emissions targets. Others proffer that alternative mechanisms could operate with less burdensome processes and with faster approval times.

negotiating mandate under the UNFCCC unless agreement is reached for a new commitment period under the Kyoto Protocol with binding GHG targets only for Annex I Parties.

Proposals on the negotiating table would establish a mandate to negotiate by 2015 a new agreement for GHG reductions that would take effect by 2020. There exists a current stalemate, however, on whether to pursue a new agreement. On the one hand, the United States has been cool to such a mandate: it seeks assurance that *all* major emitters, including China and other non-Annex I Parties, would be bound by commitments in any future agreement. Further, the United States looks for clarity on the content of any agreement before considering the degree to which it would be “legally binding.” China and some other large emitters, on the other hand, resist opening discussions that could demand from them anything more than voluntary commitments. This may be due in part to the uncertainty they would face in achieving a meaningful and precise target, and to concerns that emissions limits could obstruct their priorities to raise incomes to those of the wealthy economies and to alleviate poverty. China has argued forcefully that, because the current Annex I Parties are responsible for most of the accumulated GHG in the atmosphere, they must comply first with their past commitments before it will begin negotiating new ones.

Many observers consider that a formal decision by the Parties on a negotiating mandate is unlikely from the Durban meeting, but that an informal agreement may emerge.

Strengthening GHG Reductions

The Copenhagen Accord and the Cancun Agreements acknowledged a common goal for policies to limit warming to 2°C (3.6°F) above the pre-industrial global average temperature.¹⁵ (A number of countries, including those perceived to be most vulnerable to further warming, urge lowering that goal to a limit of 1.5°C above pre-industrial temperatures.) To achieve such a goal, some analysts have estimated that the Annex I Parties would have to reduce their GHG emissions to 50% below 1990 levels by 2020 and more than 85% by 2050, and that the emissions of all countries would have to peak no later than 2020 and be at least 80% below 1990 levels by 2050.¹⁶

Notwithstanding the 2°C goal, current pledges to abate GHG emissions are projected to be insufficient to reach it, much less the 1.5°C option. Though many delegations (especially those of the Climate Vulnerable Forum) and observers continue pressure on other Parties to make more ambitious GHG reduction commitments, quantitative strengthening of pledges is not expected to emerge in Durban.

Reporting and Reviews

The UNFCCC and the Kyoto Protocol contain obligations for Parties to create and report inventories of their GHG emissions and removals by sinks of GHG (i.e., forests and other growing vegetation). The Annex I Parties must also report their policies and measures to reduce

¹⁵ Of that 2°C, some 0.7°C has already occurred and some scientists have estimated that another 1°C (1.8°F) may be inevitable due to past emissions in atmospheric concentrations of carbon dioxide and other GHG.

¹⁶ These figures are best understood as approximate, as global climate models do not provide precise results. See, among other scientific assessments reaching similar conclusions, Committee on Stabilization Targets for Atmospheric Greenhouse Gas Concentrations; National Research Council. *Climate Stabilization Targets: Emissions, Concentrations, and Impacts over Decades to Millennia*. Washington, DC: The National Academies Press, 2011.

GHG emissions and their projections of the effects of these measures on emissions and removals and, if a Party to the Kyoto Protocol, to demonstrate compliance with their commitments under the Protocol. The requirements for reports have been underpinned by common methodological guidelines adopted by the Parties. For the Annex I Parties, inventories are reported annually and broader national communications are submitted approximately every four years; all these are subject to expert desk reviews and in-country reviews by external experts.

The Copenhagen Accord and Cancun Agreements (CA) call for *international assessment and review* (IAR) of the *quantified economy-wide emission reduction targets* (QEETS) and mitigation of the Annex I Parties, and for *international consultation and analysis* (ICA) of actions by the non-Annex I Parties that do not receive international support. Actions by non-Annex I Parties that receive international financing are subject to further *monitoring, reporting, and verification* (MRV). Added to the reporting requirements for the wealthiest countries is a new agreement to submit information about provision of finance internationally for mitigation and adaptation.

The exact purposes, scopes, methods, and potential consequences of the CA reporting and reviews remain to be defined by the Parties. Though the language concerning Annex I and non-Annex I Parties varies, some countries and experts seek parallel provisions for all Parties; other countries cite among their concerns the possible infringement of national sovereignty and lack of expert capacity as reasons to set looser requirements for non-Annex I Parties. Although agreement on the specific requirements is not expected in Durban, decisions are eventually likely regarding

- guidelines for biennial reports from both Annex I and non-Annex I Parties;
- details regarding establishment of a “registry” of actions by non-Annex I Parties;
- guidelines for Common Accounting Rules for both *international assessment and review* (IAR) and *international consultation and analysis* (ICA); and
- monitoring, reporting, and verification (MRV) of financial support provided by Parties in a common reporting format (CRF).

Reduced Emissions from Deforestation and Forest Degradation, Plus Forest Conservation (REDD+)

Experts widely acknowledge the importance of growing vegetation to removing carbon from the atmosphere through photosynthesis, as well as the threat of continued deforestation and forest degradation to that continued “sink.”¹⁷ Thus, there is broad agreement that the UNFCCC should establish incentives for “Reduced Emissions from Deforestation and Forest Degradation” and for forest conservation (REDD+) in the form of credits to tropical countries that can demonstrate successful REDD+ actions. Those credits could be sold to other countries to help them achieve their GHG targets. However, Parties have not reached agreement on what would constitute acceptable baselines for measuring forest protections, how to measure the enhanced carbon uptake, and the monitoring and international verification desired to ensure that the REDD+ credits are beyond what would have happened anyway.

¹⁷ CRS Report R41144, *Deforestation and Climate Change*, by Ross W. Gorte and Pervaze A. Sheikh.

Three REDD+ issues that may be addressed in Durban include

- how REDD+ actions may be financed;¹⁸
- guidance on reporting carbon reductions from REDD+ projects, and particularly how to establish *reference levels* from which emission reductions may be counted; and
- guidance for an *information system* to ensure that social, governance, and environmental safeguards are effective for REDD+ actions.

Finance

In Cancun, Parties agreed to establish a Green Climate Fund (GCF), through which a portion of financing will flow to support low-income countries' actions on mitigation and adaptation.¹⁹ A Transitional Committee was tasked with recommending the design of the Fund for approval by the Conference of the Parties (COP) in Durban. The COP will also need to decide on the role and composition of a new Standing Committee on financial matters, agreed in Cancun, that would assist the COP in coordinating and streamlining the various funds established under the UNFCCC and Kyoto Protocol, and in ensuring transparent reporting and verification of financing provided by Parties.

United Nations Secretary General Ban Ki-Moon has urged that governments expedite mobilization of financial resources, saying, "An empty shell is not sufficient."²⁰ Fast-start funds were pledged to be "new and additional" above funding available prior to 2009, though accounting and reporting are not transparent and many observers consider that a portion of the reported funding constitutes re-packaging of previously existing flows.

Many in low-income countries have stated that all the \$100 billion annually pledged to be mobilized by 2020 should flow through the Green Climate Fund (GCF). Others consider that most of the funds are likely to flow through private investment and financing arrangements, bilateral cooperation, multilateral financial institutions, and a portion through the GCF. While some Parties would like to set a quantitative target for the portion to go through the GCF, other Parties (including the United States) do not see the need.

Countries disagree, likewise, on the sources of financing to be counted towards the \$100 billion goal. The text of the Cancun Agreements states that the monies should come from "a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance." The United States and many high-income countries say that the majority of funding must come

¹⁸ The United Nations Environment Program has estimated that some US\$17-40 billion would be required to halve the current emissions from the forestry sector, while about US\$5 billion has been pledged (mostly by Norway). United Nations Environment Program Finance Initiative. "REDDy Set Grow Part 2—Private sector suggestions for international climate change negotiators—Designing an effective regime for financing forest-based climate change mitigation," 2011.

¹⁹ For further information about financing climate change actions internationally, see CRS Report R41889, *International Climate Change Financing: The Green Climate Fund (GCF)*, by Richard K. Lattanzio; and CRS Report R41808, *International Climate Change Financing: Needs, Sources, and Delivery Methods*, by Richard K. Lattanzio and Jane A. Leggett.

²⁰ Associated Press. "UN chief urges leaders to finalize financing of \$100 billion climate change fund." *Washington Post*, November 14, 2011, sec. World.

from the private sector through appropriate incentives; many developing countries contend that most or all of the funding should come from public funding, which they may consider to be more reliable and transparent. These latter delegations may believe that governments are better able than private businesses to commit a firm amount of funding and deliver on that commitment. There are also proponents of new mechanisms to provide steady funding that would not rely on countries' appropriations processes; proposals have included reserve and sales of carbon emission allowances, fees on international financial transactions, fees on international aviation and marine fuels, and transfer of existing subsidies for fossil fuels to the GCF.

In addition, the United States and some other delegations insist that the middle-income countries, including China and India, should also contribute to the Climate Green Fund.

The United States (and others) wants the World Bank to manage the new fund, while most developing countries prefer it to be managed under the United Nations, where they may achieve "direct access" to the monies and feel they have a stronger role in managerial decision-making. The October 2011 meeting of the Transitional Committee did not unanimously adopt a design for the Green Climate Fund, but referred a draft for a decision by the Conference of the Parties in Durban. The United States did not agree to the proposal, concerned that the Board of the GCF would not be acceptably independent from the COP.

Technology Mechanism

The Cancun Agreements mandated establishment of a Technology Mechanism, including a Technology Executive Committee (TEC) for strategic planning purposes and a Clean Technology Centre for carrying out actions to stimulate technology deployment. The COP in Durban is expected to decide several rules necessary to allow the mechanism to begin to operate in 2012, for example, how to select the members of the TEC. The COP may decide also whether addressing intellectual property is within the scope of the Technology Mechanism. This topic was omitted from the language establishing the Technology Mechanism when countries could not agree. In general, the United States and other industrialized countries would exclude intellectual property from the scope, while many low-income countries would like to consider intellectual property protection as a barrier to technology deployment and, consequently, an issue to be addressed by the TEC. In addition, several options regarding the relationships of the two bodies to each other, to the Adaptation Committee (see below), and to the Conference of the Parties are on the table for resolution in Durban.²¹

Adaptation

As global temperatures continue to increase, and as many Parties perceive that pledges to mitigate GHG emissions are likely insufficient to abridge climate change, more attention and urgency is being given to addressing adaptation under the UNFCCC. Parties have differing views on what would constitute acceptable "balance" between efforts to mitigate GHG-induced climate change and to adapt to its effects. Though the Cancun Agreements established a new Adaptation Committee, it remains unclear whether and how this new process and other multilateral efforts will stimulate effective adaptation—especially by the most vulnerable populations.

²¹ A summary of the options and implications is available from Marta Darby, Nicholas School of Environment, Duke University, at <http://sites.duke.edu/duketodurban/2011/11/13/technology-mechanism-who-governs-whom/>.

Agreement is expected in Durban on decisions necessary to operationalize the Adaptation Committee. Provisions in the draft decision regard the composition of the Committee; its relationship to the Conference of the Parties (COP) and to other institutions (including the Standing Committee on finance and the Green Climate Fund); and the Committee's scope and authority. Another issue is how to allocate available funding and, more specifically, how to give priority to the "most vulnerable countries."

Parties may agree in Durban to include in the activities of the Adaptation Committee a work program on "loss and damage" associated with climate change in developing countries. Some Parties also seek a mandate for a decision in 2012 (at COP 18) regarding reduction of disaster risks and improved risk management, a proposed international insurance mechanism, and a proposed rehabilitation mechanism.

2013-2015 Periodic Review

The COP in Cancun mandated a review from 2013-2015 of the long-term goal of limiting global temperature increase to 2°C above the pre-industrial level, and provides for consideration of whether that goal should be tightened to 1.5°C, as urged by small island states and other populations that consider themselves acutely vulnerable to climate change. The Durban conference will address what the scope of that review should include, and the "modalities" of how it may proceed.

Author Contact Information

Jane A. Leggett
Specialist in Energy and Environmental Policy
jaleggett@crs.loc.gov, 7-9525