A Proposal for a Consultative Group for Low Emissions Development

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Abstract

Interest in low emissions development is growing in many parts of the world for both climate and nonclimate reasons. Yet in order to pursue low emissions development, gaps in knowledge and implementation capacity must first be identified and and then filled through peer-to-peer learning and applied research. Governments, multilateral development banks, and nongovernmental organizations are responding to country-led efforts to implement low emissions development policies through an array of country-specific programs and projects. Most of these international programs operate independently, with collaboration among implementing agencies occurring on the margins at the national or local level. While these initial efforts are laudable and have yielded valuable knowledge and progress, the opportunity is ripe to leverage these activities for greater impact. Greater global cooperation through semiformal coordinating mechanisms could ensure greater coverage of low emissions development activities, enhance the scale and predictability of funds, and improve the ease with which countries engage in peer-to-peer exchanges. We propose that a new Consultative Group on Low Emissions Development (CGLED) could serve as this coordinating mechanism.

Key Words: low emissions development, growth, donor, coordination, cooperation, consultative group, peer-to-peer

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Contents

Introduction	1
Important Knowledge Gaps	2
	3
The Players and the Funding Channels	4
Program Priorities	5
Shortcomings and Risks of the Current Approach	7
Leveraging for Greater Impact: Consultative Group Model	11
Governance	12
Relationship to UN Climate Negotiations	14
Conclusions	15
References	17
Appendix: Agencies and Organizations Cooperating on Low Emissions	
Development	20

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Introduction

There is growing recognition across the globe that many development and climate policies can be mutually supportive—that well-designed economic growth initiatives can also yield climate protection benefits. A number of countries, particularly major emerging economies, are embracing a transition toward low emissions development as their preferred economic growth pathway. China and South Korea, for example, are investing heavily in clean energy to stimulate economic growth, improve public health, and control the commanding heights of the 21st-century energy economy. China has closed and replaced 54 gigawatts (GW) of coal- and oil-fired power since 2007 to reduce pollution, improve efficiency, and contribute to energy security (Oster 2010). Korea, for example, will invest \$36 billion over the next five years in developing its renewable energy industries, creating an estimated 110,000 jobs from new exports by 2015 (Young 2010). India is investing in solar energy as a cost-effective means of bringing electricity to the rural poor. In fact, developing countries are now installing more renewable energy capacity each year than developed nations. India is also promoting energy efficiency to improve its energy security. Mandatory fuel efficiency standards for vehicles are expected this year; the standards are estimated to reduce oil use by up to 20 percent in 2030 (TERI 2010).

Japan has pledged to reduce emissions 25 percent below 1990 levels by 2020 (Japanese Embassy 2010). Europe is moving toward a 25 percent reduction in emissions by 2020 (EC 2011). Brazil is poised to achieve its goal of reducing emissions 39 percent below business-as-usual levels by 2016 (Colitt 2010). Deforestation in the Amazon is down more than 75 percent from its 2005 high, thanks to better law enforcement, agricultural intensification, and other interventions that provide local and national benefits. Indonesia, the world's third-largest

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(see GLCA 2007).

1

greenhouse gas emitter, is moving toward a moratorium on deforestation—by far its largest source of emissions (*BBC News* 2010).

Admittedly, many of these low emissions development initiatives are just beginning. Global greenhouse gas emissions continue to skyrocket. According to the International Energy Agency (IEA), energy-related carbon dioxide emissions were the highest on record last year. Furthermore, roughly 80 percent of projected energy-related emissions in 2020 are locked-in, meaning that they will come from power plants already operating or under construction. Investments in fossil fuel capacity are projected to grow, although renewable energy capacity will command roughly 42 percent of total new capacity in developing countries by 2035 (Weischer et al. 2011). Successfully pursuing low emissions development will take time and will require nations to overcome many challenges. The important point here, however, is that these countries see the transition toward low emissions development as the preferred development pathway for a mix of climate and nonclimate reasons, with the local economic and social benefits often serving as the primary political drivers.

Important Knowledge Gaps

While interest in low-emissions development is growing in many parts of the world, many important gaps in knowledge and implementation remain. Most countries don't yet know what policies have worked elsewhere or are proven "best-practice" policy approaches.

Empirically speaking, for instance, which strategy for promoting clean electric power generation has been most effective in terms of greenhouse gas abatement and cost efficiency around the world: government funded R&D, long-term purchase agreements (feed-in tariffs), technology mandates, or efficiency standards? Or do these policies work best in tandem and, if so, in what mix and sequence? Even when one policy approach stands out, many nations lack the technical and governance capacity to tailor proven best-practice policies to fit their local circumstances. Policymakers from Cairo to Jakarta are likely to have heard of the bus rapid-transit systems that are successfully promoting development and reducing pollution in places like Curitiba, Brazil, but decisionmakers generally lack ready access to rigorous analysis about whether similar investments would work locally and, if so, how best to adapt them to meet local needs.

Filling gaps in knowledge and implementation capacity around low emissions development policies is becoming a priority for many nations. Almost 90 percent of the development strategies submitted by nations to the World Bank identify smart climate change policies as one of their top priorities, a massive increase from a decade ago. More than half of the developing countries in the G20 identify a need for greater capacity, especially among

government agencies and regulators. In addition, many of these have identified a specific need for technical assistance relating to best-practice policies. For example, the National Climate Change Response Policy of the South African Government states that its actions "need to be underpinned by the requirement for the international community to make commitments regarding the necessary financial, technical and capacity building support to enable implementation of these mitigation actions." Similarly, the clean technology roadmaps produced by the IEA highlight the necessity for international collaboration and point to a specific need for technical assistance on best-practice policies. Furthermore, this dearth of understanding and implementation capacity is not limited to developing nations. Developed countries are also seeking to leverage peer-to-peer information sharing and learning on clean energy technologies through venues like the Clean Energy Ministerial. 2

Current International Cooperation on Low-Emissions Development

Governments, multilateral development banks, and nongovernmental organizations are responding to the growing interest in filling gaps in knowledge about low emissions development policies and are doing so mostly through an array of country-specific programs and projects. Most are focused on helping countries create national low emissions development strategies (LEDS), which, according to the Organisation for Economic Co-operation and Development (OECD), are forward-looking national economic development plans that chart economic growth along a low emissions or climate-resilient pathway—an essential first step in pursuing climate-smart development (Clapp et al. 2010). These international programs operate independently to a large extent, with collaboration among implementing agencies occurring on the margins at the national or local level. No overall international architecture exists to harmonize these efforts, as the following survey reveals.

1

¹ Developing countries are defined here as non–Annex I countries under the UNFCCC. Nine non–Annex I developing countries are included in the G20: Argentina, Brazil, China, India, Indonesia, Mexico, Saudi Arabia, South Africa, and the Republic of Korea. Of these countries, Argentina and Saudi Arabia are the only ones that have not submitted Nationally Appropriate Mitigation Actions (NAMAs) and have not concluded national climate plans. Of the remaining seven, all but China and Korea have acknowledged a need for greater capacity in the course of their national climate plans.

² The Clean Energy Ministerial is a high-level global forum to promote policies and programs that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy. Initiatives are based on areas of common interest among participating governments and other stakeholders. For more information, see CEM 2011.

The Players and the Funding Channels³

The players in the low emissions development include traditional government agencies, multilateral development banks, philanthropic foundations, and a variety of research- and advocacy-orientated nongovernmental organizations scattered across developed and developing countries. (The Appendix at the end of this paper provides greater detail on the players involved.)

One of the most prominent is the Global Green Growth Institute (GGGI), which was launched by the South Korean government and other international partners in June 2010. GGGI supports developing countries by providing technical assistance, such as macroeconomic analysis of the impacts of low-carbon development strategies on economic growth, employment, and poverty reduction (GGGI 2011).

The Climate and Development Knowledge Network (CDKN) provides developing-country policymakers in 60 countries with "information and advice to help them make long term policy decisions that are resilient to climate change and consistent with low carbon development" (DFID 2010). To create this network, the United Kingdom's Department for International Development has contributed 50 million pounds sterling and the Netherlands has provided additional funds (CDKN 2011).

The United States is helping other countries through its newly launched Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) program. The \$10 million program currently targets 5 countries—Bangladesh, Colombia, Gabon, Mexico, and Vietnam—with the hope of expanding to 20 countries by 2012.

Among the development banks, the World Bank has been at the forefront. Its Energy Sector Management Assistance Program (ESMAP), for instance, has worked with emerging economies since 2007 to prepare Low Carbon Growth Country Studies in Brazil, China, India, Indonesia, Mexico, and South Africa, along with carbon accounting and impact assessments (ESMAP 2009). Sector-specific studies are under way with Nigeria and Morocco.

In addition to traditional donors, advocacy organizations, private companies, and charitable foundations are increasingly prominent players in terms of both agenda setting and funding strength. One of the first programs involving such players was created by the Center for

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³ This section has benefitted tremendously from the work of the Coordinated Low Emissions Assistance Network (CLEAN). For more information, see Open Energy Info (2011a).

Clean Air Policy in 2005. This program has helped assess greenhouse gas mitigation opportunities with economic and climate cobenefits in China, India, Brazil, Mexico, and Indonesia. Likewise, McKinsey & Company popularized greenhouse gas abatement cost curves beginning in 2007. The ClimateWorks Foundation has one of the largest global programs, which it administers through its Best Practice Network (BPN), a collection of leading globally distributed experts in low emissions development policies organized by major economic sectors. The Children's Investment Fund Foundation and the SouthSouthNorth Project are partnering to support the development of mitigation action plans and scenarios that stress learning and cooperation, primarily among developing nations, an emphasis that is likely to gain steam going forward.

Program Priorities

Given the proliferation of independent low emissions development initiatives, it is no surprise that program priorities vary widely, as do the tools used to achieve these objectives. No single methodology exists that precisely captures how countries pursue low emissions development, but generally nations seem to be following some combination of the stages depicted in Figure 1. Low emissions development activities can be grouped broadly into planning and implementation. Stages within the planning context range from developing business-as-usual emissions scenarios to assessments regarding a country's clean energy availability and general market conditions, developing future emissions scenarios and impact assessments, and creating LEDS. On the implementation side, activities are focused on unlocking the mitigation potential identified in the LEDS through sector-specific policies and programs, as well as regular monitoring and evaluation (Cox and Benioff 2010).

Figure 1. Common Stages of Low Emissions Development Planning and Implementation

	Activity	Deliverable	
	Baseline greenhouse gas emissions analysis and projections	Greenhouse gas inventories Business-as-usual emissions scenarios	
	Technological and market analysis	Clean energy and forest resource availability assessment Market viability assessments for clean technologies	
Planning	Scenario development and impact assessments	 Greenhouse gas emissions scenarios with differing projections of economic growth and climate conditions Impact reports of alternative emissions scenarios 	
	Low emissions development strategies (LEDS)	 Marginal abatement cost curves Prioritization of mitigation opportunities Identification of funding sources and barriers to implementation 	
	Restructure policy/enabling environment	Institution of cost recovery mechanisms Incentivizing modified behavior	
mplementation	Sector-specific programs	•Tailoring best practice policies and technologies to local circumstances	
leme	Training	Handbooks and trainings for regulators	
Im.	Monitoring and review	 Mitigation inventories based on policy and technology interventions 	
		•Determination of whether policies should be revised	

Source: Modified and adapted from Cox and Benioff (2010)

A 2010 joint report by the OECD and the IEA sought to take stock of some of the initiatives related to low emissions development (Clapp et al. 2010). Of the 15 initiatives identified in the report, nearly 50 percent prioritize activities associated with the development of national plans or strategies for low emissions development, whereas others focus more broadly on technology assessment and emissions scenario development. The study identifies only one initiative that focuses on the actual implementation of sector-specific policies and programs.

Shortcomings and Risks of the Current Approach

While it is laudable that governments, multilateral development banks, and nongovernmental organizations (NGOs) are responding to the growing interest in low emissions development policies, the ad hoc nature of current international efforts presents several risks.

Lack of Coordination

A key impediment to the effectiveness of official development assistance, in general, is insufficient donor coordination, information sharing, and planning, which can lead to waste, duplication of effort, and overlap in certain functions. Costs associated with insufficient donor coordination have been widely cited across the development literature (see Acharya et al. 2006; Arimoto and Kono 2009). Poor coordination can create "orphaned" issues if donors rush to the same cause, funding some issues while others are neglected. Administrative costs can rise both in key developing-country agencies and in the proliferation of dedicated project management units in donor and client countries alike (Kharas 2007). Insufficient coordination often stems from a crowded donor space, where forums for communication are limited and different political objectives, relationships, and interests determine where funds flow.

When it comes to current efforts to promote policies for low emissions development, basic mechanisms for information sharing among different donors and between the donor community and recipient countries are being developed through the Internet.⁴ These efforts have made critical inroads by creating inventories of partner activities and maintaining virtual platforms to share methods and tools that link experts through peer-to-peer knowledge sharing. Yet these platforms have neither the mandate nor the membership to influence policy and harmonize funding decisions.

Gaps

Lack of coordination among donors can result in gaps as some countries or sectors become the focus of international attention at the expense of others (see Map 1). Donor darlings are frequently favored because political will within a country to implement programs is high and its internal capacity to execute projects is growing. For example, according to the CLEAN inventory, the international community supports 38 low emissions development programs in

7

⁴ These virtual platforms include the Clean Energy Ministerial's Solutions Center; the Coordinated Low Emissions Assistance Network (CLEAN); and the World Bank, OECD, United Nations Environment Programme (UNEP), and GGGI's Green Growth Knowledge Platform.

Mexico alone, 3 of which aimed at preparing LEDS. The duplication, triplication, and so on of work wastes time, effort, and money (Knack and Rahman 2007).

Interviews with officials in government agencies and experts in the nongovernmental sector suggest that this problem is becoming acute for two reasons. First, while the major emitters have been the focus of international efforts to support developing countries, a big gap in terms of capacity exists between middle- and low-income countries. As one expert points out on the condition of anonymity, "The international community needs to broaden its attentions so that other countries, such as Cambodia, Vietnam, and Thailand, are also building their capacity." Second, even among the major emitters, the tendency to concentrate assistance in specific sectors could leave others neglected. For example, in Brazil and Indonesia, much of the assistance is directed toward the forestry sector, despite limited technical capacity in other parts of the economy.

Low emission planning programs
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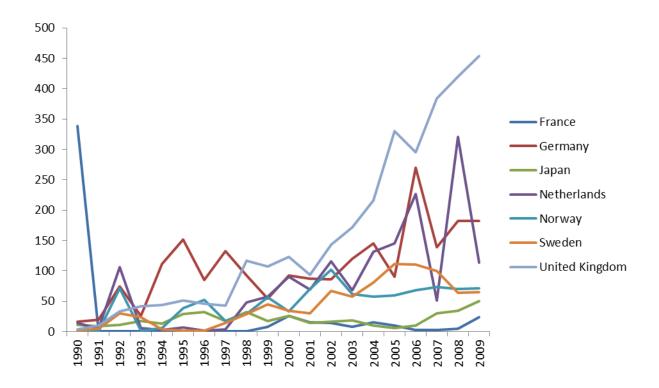
Map 1. Geographic Distribution of Low Emissions Development Programs

Source: Open Energy Info (2011b)

Unpredictability

Given the bilateral nature of many of these projects, activities are constrained by short time horizons and changing partner preferences. For national governments, election cycles present difficulties in committing to assistance programs over the long term. New legislative agendas and political climates make official development assistance (ODA) funding particularly volatile. As Figure 2 depicts, bilateral commitments for population and reproductive health, for example, have varied widely over the past two decades. This volatility pervades many other areas of foreign assistance as well. For instance, U.S. assistance for water and sanitation has oscillated greatly from year to year: commitments to water and sanitation projects grew 281 percent in 2001, only to fall by 82 percent the following year, but then increased again by 24 percent the next year. Foundations and NGOs are also prone to curtailing funding for initiatives, although less so than governments, given changing strategic priorities imposed by constituents and board members.

Figure 2. Official Bilateral Commitments to Population Policy/Programs and Reproductive Health (2008 US\$, millions)



Absence of Scale

Achieving scale is also a concern under the current model for international collaboration. The Copenhagen Accord established a "fast start" financing goal of \$30 billion by 2012 and a 2020 goal of \$100 billion to finance climate change mitigation and adaptation activities in developing countries. Historic allocations would suggest that \$6.3 billion should go to technical cooperation for climate change policy, administrative management, and research in the fast start time frame, and \$21 billion should go to technical assistance in the medium term. ⁵ To date, countries have committed roughly \$6 billion in fast start finance for all climate change efforts in developing countries. ⁶ It is unlikely, therefore, that needed sums will be put toward technical assistance for low emissions development without significantly leveraging those activities that are showing early success.

Traditional Aid Dynamic and Mentality

As a model, strict North-South knowledge transfer has become outdated. With a number of notable exceptions, activities in the low emissions development arena rely on North-South knowledge transfer rather than supporting peer-to-peer exchanges. South-South cooperation for capacity building has gained momentum with the rise of rapidly emerging nations. For low emissions development in particular, South-South cooperation could be quite effective given that sector specialization is already occurring; for example, Brazil has shown leadership in spreading knowledge in the forestry sector. Networking countries' sector-specific knowledge and expertise through increased peer-to-peer exchanges could speed up the uptake and implementation of low carbon strategies and enhance the effectiveness of policies from the outset.

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⁵ Absent estimates of country need for technical assistance in support of low emissions development, historic data on technical cooperation for environmental protection can be used as a reasonable proxy. Over the past decade, technical assistance has accounted for approximately 30 percent of all ODA disbursed for environmental protection. Of that technical assistance, roughly 70 percent has gone toward support for environmental policy, administrative management, and research.

⁶ This figure is based on data obtained from Fast Start Finance (2011) and includes only committed funds and not pledged funds. Fast Start is an initiative of the government of the Netherlands with support from the governments of Costa Rice, Colombia, Denmark, Germany, Indonesia, the Marshall Islands, Mexico, Norway, the United Kingdom, and Vietnam.

Leveraging for Greater Impact: Consultative Group Model

Given the increasing momentum around low emissions development, the opportunity is ripe to leverage the activities of all actors in this space for greater impact—to ensure that the whole amounts to more than the sum of its parts. Greater global cooperation through semiformal coordinating mechanisms could ensure greater coverage of low emissions development activities, enhance the scale and predictability of funds, and improve the ease with which countries engage in peer-to-peer exchanges. A new Consultative Group on Low Emissions Development (CGLED), modeled loosely on the best elements of the Consultative Group on International Agriculture Research (CGIAR), could serve as such a coordinating mechanism.

The CGLED would be a distributed global network of specialized "solution centers" predominantly from the developing world, designed to put world-class technical and policy knowledge to work on behalf of countries seeking to implement low emissions development strategies. The CGLED solution centers would help nations tailor sector- and region-specific best-practice policies to local circumstances. Solution centers would specialize in policy interventions relating to key economic sectors (such as electricity generation), regions, or specific technologies (such as carbon storage). Specialization would ensure efficiency, avoid duplication, secure economies of scale, and guarantee deep expertise. These solution centers also would help disseminate uniform standards that reduce emissions, lower costs, and foster economic growth. Most solution centers would be selected from existing best-in-class nongovernmental institutions focused on technical analysis and climate policy interventions today. As needed, new centers could be created to fill critically important gaps.

Supporting nations through peer-to-peer specialized, technically oriented solution centers is a proven model for spurring effective global action. Since the 1970s, the CGIAR has promoted global food security, poverty alleviation, and sustainable development, with impressive results. Of the world's 10 most important food crops, for example, more than half the land growing improved varieties has CGIAR ancestry. Currently comprising 15 agricultural research centers supported by 64 public and private donors, the CGIAR fosters better land use and natural resource management in ways that improve lives around the world. For every \$1 invested in its research, the CGIAR has delivered \$9 worth of additional food in developing countries. The Table 1 highlights similarities between the CGIAR and the proposed CGLED.

Table 1. Comparison of CGIAR and CGLED Centers

	CGIAR	CGLED
Mission	Global public good (food security)	Global public good (low emissions development)
Structure	Global network of research centers	Global network of solution centers
Origins and funding	Public-private partnership among governments and private foundations	Public-private partnership among governments and private foundations
Centers	Highly specialized (crops) nonprofit organizations, many of which were existing	Highly specialized (economic sectors) nonprofit organizations, many of which would be existing
Location	Geographically distributed	Geographically distributed

Governance

Lead donors (public and private), recipients, and representative stakeholders would serve on a Partnership Council with responsibility for selecting solution centers and creating a coherent global strategy for the CGLED system. Funders would agree to align their financial contributions in support of the overall CGLED strategy but would retain the right to support only particular elements of the strategy, as they see fit. Funding would flow directly from donors to recipients, not through a global fund. The Partnership Council would also establish an overall multiyear budget, based on pledges from each donor. While remaining legally independent, solution centers would coordinate through a Consortium Agreement to encourage specialization and indepth expertise, avoid duplication, and encourage collaboration. An existing international financial institution or major international organization would host a small CGLED secretariat charged with a) staffing the Partnership Council; b) facilitating the negotiation and drafting of the Consortium Agreement and the Partnership Council strategy; c) convening periodic meetings of CGLED members; and d) monitoring the activities of both donors and solution centers and evaluating them against the Partnership Council strategy and the CGLED's objectives (see Figure 3). This approach would have several advantages:

• Quick start-up

Because a good number of existing climate policy institutions across the developed and developing worlds are well suited to become solution centers, the CGLED could begin

12

operating almost immediately. Funding during the first year or so could flow through traditional bilateral mechanisms, while legal arrangements are being worked out. This affords donors the opportunity to demonstrate fast action on climate solutions absent a global deal, and to contribute to one of many efforts that will be needed to support technology development and transfer in the coming decades.

• Leverage

Pooling public and private resources would maximize available moneys, achieve economies of scale, and improve returns on investment.

• Culture

A global strategy of supporting institutions that can respond nimbly to developingcountry requests for assistance would build a strong demand-driven culture.

• *Stable platform*

By establishing a formal global structure, a coherent strategy, and multiyear funding pledges, the CGLED would ensure adequate and predictable funding.

• Diverse input

The Partnership Council could include a diverse set of countries and stakeholders to mirror global best practices on governance, ensuring broad participation and widespread support.

• Global coordination

The CGLED would help ensure that global investments in climate change technical assistance represent a balanced and robust portfolio of approaches to reduce the risk that donors inadvertently would underfund critical interventions. The consortium agreement among the solution centers would help avoid duplication and inefficiency among leading climate policy institutions.

In the current political and economic environment, this approach makes a great deal of sense. First, the international community has limited appetite for new institutions, as they take years to make operational, often prove unnecessarily costly, and can contribute to the proliferation of institutions. Second, new international climate funding seems likely to be limited in the near term, so mechanisms that enhance efficiency, encourage coordination, and provide a platform for bigger financial investments in the future are needed now. Third, there is a strong preference among developed countries to maintain some degree of control over the funds they provide. Norway's decision to use bilateral rather than multilateral mechanisms to structure the majority of its investments in reducing deforestation is a case in point (Norwegian Embassy

2010). The general preference by donors to direct their climate finance investments seems unlikely to change, and new multilateral mechanisms are most likely to attract substantial funds from donors if they work with rather than fight against this long-standing preference.

Partnership Council **Public** Recipient Private Stakeholders **Donors Countries Donors** Individual donors direct funding to specific centers within the Consortium, in consultation Small Secretariat with the Partnership Council **Consortium Agreement** Electric Economic Modeling Regional Forestry Industry Power Centers Center Center Center Center Public Urban Buildings Agriculture **Appliance** Other Transport Planning Center Center Centers Center Center

Figure 3. Envisioned CGLED Structure

Relationship to UN Climate Negotiations

At the 16th Conference of the Parties to the UN Framework Convention on Climate Change in Cancun, Mexico, in December 2010, nations created a new Climate Technology Centre and Network (CTCN). Though negotiators are still ironing out the details, the CTCN will consist of a small center and large network of institutions that will promote international technology transfer. The CTCN is a welcome development, but it will take time for negotiators to agree on the scope and concrete objectives of the network. It will take longer to agree on its structures, implementation strategies, and funding modalities, and it will take even longer still for the CTCN to be operational.

Nations also agreed in Cancun to create a new Green Climate Fund. As with the CTCN, it will take some time for this new mechanism to be fleshed out, funded, and fully operational.

Yet the world needs development and climate actions now. Just as the World Bank proceeded to fund climate action through the Climate Investment Funds several years ago, while the terms of the Copenhagen and Cancun agreements were being hammered out, other flexible, semiformal platforms that can promote climate action now are essential. Nowhere is this more the case than in the rapidly growing area of low emissions development, which both developed and developing nations view as a high priority. The CTCN and the Green Climate Fund may one day become the permanent mechanisms for sharing knowledge about best-practice low emissions development policies, but a CGLED is necessary today as an interim mechanism to make sure nations have access to rigorous analysis and the world's leading experts.

Conclusions

Interest in low emissions development is growing around the world from the bottom up. National and local decisionmakers and stakeholders are thirsty for knowledge about what policies and practices have worked elsewhere, and they desire technical assistance to customize those global best-practice approaches to fit local circumstances. This is the exciting, opportunity-filled, and mutually supportive portion of the global development and climate change agendas.

Although many of the low emissions development programs are in their infancy, lessons are beginning to emerge that could usefully inform future projects. Interviews with officials in government agencies and experts in the nongovernmental sector suggest that policymakers need to address several areas. First and foremost is coordination among donors. As one official describes it, agencies are working in a very congested space with a large number of people doing similar things, and thus they need ways to collaborate. Without adequate coordination and information sharing among the main actors, there is a risk of overlap and waste, which not only are inefficient, but also could lead to some developing countries and sectors being neglected. Second, assistance to developing countries should be flexible and tailored to specific country circumstances, not just to the whims of developed-country donors. Many programs, such as the CDKN, are already doing this. Third, technical assistance is not a one-way street from developed to developing countries. Some developing countries are at the forefront of global best practice and have much to offer other developing and developed countries. For example, in the forest sector, Brazil is a clear leader and has already assisted Indonesia with its efforts to reduce emissions from deforestation. In short, technical assistance needs to be peer to peer. Fourth, technical assistance should continue over the long term to support developing countries not just

in planning low emissions development strategies, but also through to policy design and implementation. Ideally this should include an education component to build and sustain capacity where the expertise is insufficient.

A new consultative group focused on low emissions development would provide an immediately useful semiformal platform for harmonizing international efforts and speeding the distribution and creation of knowledge about which low emissions development policies actually work. A pragmatic consultative group would also provide a mechanism for scaling up international funding for technical and policy cooperation in the medium term, without prejudging ongoing global climate negotiations. The past years have shown that, regrettably, there are no easy wins on global climate and development policy—ideas that attract broad support from across the world. A consultative group to assist nations in gaining access to knowledge and analysis that would help them achieve their own national development goals, however, may just be the exception to that rule.

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Appendix: Programs Advancing Low Emissions Development

	Program	Sponsors	Partner countries	Technical scope	Time frame
1	Climate Change Capacity Building Program	European Commission and United Nations Development Programme (UNDP)	Phase 1: Kenya, Indonesia, Mexico, Peru, Thailand	2010 scoping activities will assess capacity-building needs for LEDS, NAMAs, and monitoring, reporting and verification (MRV) in the public and private sectors to implement actions. Program seeks to develop strong greenhouse gas (GHG) inventory systems, develop NAMAs, and improve MRV.	2010–2013
2	Climate Investment Fund (CIF)	World Bank and regional development banks	CTF: Egypt, Middle East and North Africa, Mexico, Morocco, Philippines, South Africa, Thailand, Turkey, Vietnam, Colombia, Indonesia, Kazakhstan, Ukraine, Nigeria FIP: Brazil, Burkina Faso, Democratic Republic of the Congo (DRC), Ghana, Indonesia, Laos, Mexico, Peru PPCR: Bangladesh, Bolivia, Cambodia, Mozambique, Nepal, Niger, Tajikistan, Yemen, Zambia, Caribbean, Pacific region SREP: Ethiopia, Honduras, Kenya,	Climate Technology Fund (CTF) and the Strategic Climate Fund, which supports the Forest Investment Program (FIP), Pilot Program for Climate Resilience (PPCR), and Program for Scaling Up Renewable Energy in Low Income Countries (SREP)	2008-

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			Maldives, Mali, Nepal		
3	Enhancing Capacity for Low Emissions Development Strategies	U.S. State Department and USAID	Phase 1: Vietnam, Bangladesh, Colombia, Gabon, Mexico	Assistance will build on current low emissions planning efforts in the countries to enhance capacity to design, assess, and implement these strategies. The strategies will be country led and action oriented, with a strong focus on the country's development objectives.	2010–2013
4	Green Growth Strategy	Government of South Korea, ClimateWorks Foundation	Phase 1: Ethiopia, Indonesia, Brazil	Assistance for development of green growth strategies to demonstrate that climateresilient, low emissions development is possible across differing circumstances and sectors. Methodology development will focus on development, mitigation, and climate resilience.	2010-
5	Low Carbon Growth Country Studies Program	World Bank's ESMAP	Phase 1: Brazil, India, Mexico, Indonesia, China, South Africa Phase 2: Nigeria, Morocco (sector specific)	Developed a process framework with these aims: support national goals, scope low-carbon growth study, mobilize resources, build capacity, model low-carbon pathways, identify GHG mitigation options, and implement strategies. The program is currently using lessons from the work to develop a suite of "knowledge products," including best-practice documents, guides, e-learning, and interactive training and modeling toolkits.	Phase 1: 2007– 2010; Phase 2: 2010–
6	Low Carbon Growth Planning Support	ClimateWorks Foundation, the European Climate Foundation, Project Catalyst, and McKinsey & Company	Brazil, China, DRC, Egypt, Ethiopia, Guyana, India, Indonesia, Kenya, Malaysia, Mexico, Papua New Guinea	Supported 12 countries with low-carbon growth planning activities prior to the 2009 UN Climate Change Conference of Parties (COP 15). This assistance focused on sustainable development, GHG mitigation, and climate resiliency based on country priorities and a strategic vision. Example activities included assistance with	Ended in 2009

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				development of marginal abatement cost curves and assessment of economic impacts.	
7	Low-Carbon Development Strategies Project	World Watch Institute	Dominican Republic, Haiti, Jamaica, Central American region	Policy development to complement low-carbon development strategies and development of low-carbon energy roadmaps. Plan to extend this work to other countries, regions, and municipalities in the future.	2010-
8	Developing Countries Project	Center for Clean Air Policy	China, India, Brazil, Mexico, Indonesia	Assess GHG mitigation opportunities that will have the greatest economic impact and other cobenefits. The center also seeks to assist countries in participating in the UNFCCC process.	2005-
9	Mitigation Action Plans and Scenarios (MAPS)	Children's Investment Fund Foundation (CIFF), SouthSouthNorth	Brazil, Peru, Chile, Colombia, Argentina, Indonesia, Philippines, Zambia, Ghana	Support four Phase 1 countries and four Phase 2 countries with the development of mitigation action plans and scenarios from 2010 to 2013. This program focuses strongly on stakeholder engagement and sharing of lessons and knowledge across developing countries.	2010–2013
10	Operationalizing NAMAs	International Institute for Sustainable Development	Vietnam, Indonesia	NAMA development assistance particularly focused on sustainable public procurement (SPP), energy efficiency, fossil fuel subsidy reform, and agriculture. The institute is also exploring options for supporting least developed countries (LDCs) with development of NAMAs.	
11	Paving the Way for Low-Carbon Development Strategies (LCDS)	Government of the Netherlands	Ghana, Indonesia	Working with two countries to understand better the national circumstances relating to low emissions development planning. This program seeks to support the development of country-tailored LCDS methodologies.	

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12	Quantifying Emission Reduction Opportunities in Emerging Economies	Ecofys	Brazil, South Africa, China, Mexico, South Korea	Developed emissions reduction scenarios and assessed current national policies to support low emissions development. Ultimately, this study was used to compare the "climate performance" of these countries. Also working with Mexico on NAMA templates for the transport and building sectors. Has used this work to produce a report providing guidance and general conclusions about sectoral NAMA development.	
13	Roadmap Development Assistance	IEA	China	Produced a number of technology roadmaps to provide information on technology development, policy, regulatory and legal needs, finance requirements, public participation, and international cooperation. The IEA is also now assisting individual countries with development of technology roadmaps and has produced a guide to support the development that is presented in the next section on tools.	
14	Technology Needs Assessments (TNAs)	UNDP and UNEP	Kenya, Senegal, Morocco, Ivory Coast, Mali, Argentina, Costa Rica, Peru, Guatemala, Bangladesh, Thailand, Indonesia, Cambodia, Georgia	Support to assess climate mitigation and adaptation technologies that are most suitable to their national circumstances. These TNAs will inform the development of technical assistance programs (TAPs) to support transfer of these technologies. The program will assist up to 45 countries during the three-year program period.	2010–2013

Source: Based on data compiled by the Coordinated Low Emissions Assistance Network (CLEAN)