



## SHOULD DEVELOPMENT AID BE USED TO FINANCE THE CLEAN DEVELOPMENT MECHANISM?

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*This **Climate Note** explores the question of whether industrialized countries should be allowed to use their development aid to directly finance Clean Development Mechanism (CDM) projects. After examining the arguments in favor of and against this idea, the paper recommends that CDM rules should prohibit aid-funded credit-earning projects and leave capital investments in the CDM to the private sector. At the same time, in developing countries that make the CDM a priority, aid could be used for human and institutional capacity development in both the public and private sectors, focused on creating circumstances conducive to attracting CDM projects.*

### I. INTRODUCTION

Among the Kyoto Protocol's most salient features are its market-based mechanisms designed to cost-effectively control emissions of greenhouse gases. Of the three mechanisms—emissions trading, joint implementation, and the Clean Development Mechanism (CDM)—the CDM has attracted considerable attention and raised the greatest expectations. The CDM, which can bridge the North-South divide that has long characterized the international climate change negotiations, is the princi-

pal means by which industrialized and developing countries can work together to promote sustainable development, lower the carbon intensity of new investment, and reduce the cost of meeting Kyoto Protocol obligations.

From the beginning, many negotiators have envisioned CDM as a private-sector-driven activity for two reasons. First, in the countries that have to make quantified reductions under the Kyoto Protocol (the so-called Annex I countries, comprised of industrialized countries and economies in transition), the private sector will be responsible for actually reducing greenhouse gas emissions from factories, power plants, automobiles, and other sources. Legally binding emission reduction obligations will motivate companies to find low-cost reduction options. Second, in the 1990s, private capital flows to developing countries have risen dramatically, with foreign direct investment to developing countries increasing from \$24 billion in 1990 to \$171 billion in 1998, dwarfing the \$58 billion of aid in 1998.<sup>1</sup>

Thus, most participants to the climate change negotiations envision a CDM under which private sector investors will find and finance projects in developing countries that both reduce additional

greenhouse gas emissions and meet sustainable development criteria set by those countries. Some of the project developers will be multinational corporations with operations throughout the developing world. Other project developers might be smaller companies trying to find a market niche for solar, wind, fuel cells, or energy efficiency upgrades. In some cases, host country companies or even governments might develop CDM projects, with finance being the only contribution sought from industrialized countries.<sup>2</sup>

The question for both developed and developing countries in the Kyoto Protocol negotiations is whether CDM projects can also be financed using aid funds. According to the Protocol, public entities may “participate” in CDM projects, including “in the acquisition of certified emission reductions.”<sup>3</sup> However, the exact character of that participation is “subject to whatever guidance may be provided by the executive board of the clean development mechanism.” Delegates could choose to limit the use of aid to capacity development, institution building, and other nonproject related CDM activities. Or, they could decide to approve aid-financing for specific projects, with or without certain conditions. Given the long-

standing disagreement on the issue, this seemingly small point has the potential to derail a consensus.

The paper explores these issues. Section II provides background information on how money moves to developing countries, as well as the institutions and rules that govern the various financial flows. These rules, and the international processes for their implementation, form the basis for understanding the controversy behind using aid funds to support CDM projects. They help us analyze the grounds for (Section III), and the reasons against (Section IV), using aid funds for CDM projects, and lead us to the recommendations (Section V).

## II. BACKGROUND ON FINANCIAL FLOWS TO DEVELOPING COUNTRIES

Financial resource flows originate from either the public sector (“official flows”) or the private sector. Public flows include multilateral and bilateral grants, as well as loans extended by government agencies. Private flows include foreign direct investment (FDI), portfolio investment, securities transactions, bank-

ing transactions, and export credits of private banks participating in government guarantee programs. The categories and definitions of public and private financial flows are explained in Box 1. In addition to international flows, countries also finance infrastructure and projects using domestic savings and local investment.

International financing of projects in developing countries can be arranged along a spectrum indicating the level of public and private involvement. As depicted in Figure 1, at one extreme is aid, in the form of grants (i.e., entirely publicly funded) with no loan component. At the other extreme is FDI (equity and loans) which has an entirely private character. Between these extremes are “soft” (i.e., concessional) loans, mixed credits, and other forms of finance provided by government agencies, multilateral development banks, and other financial institutions.

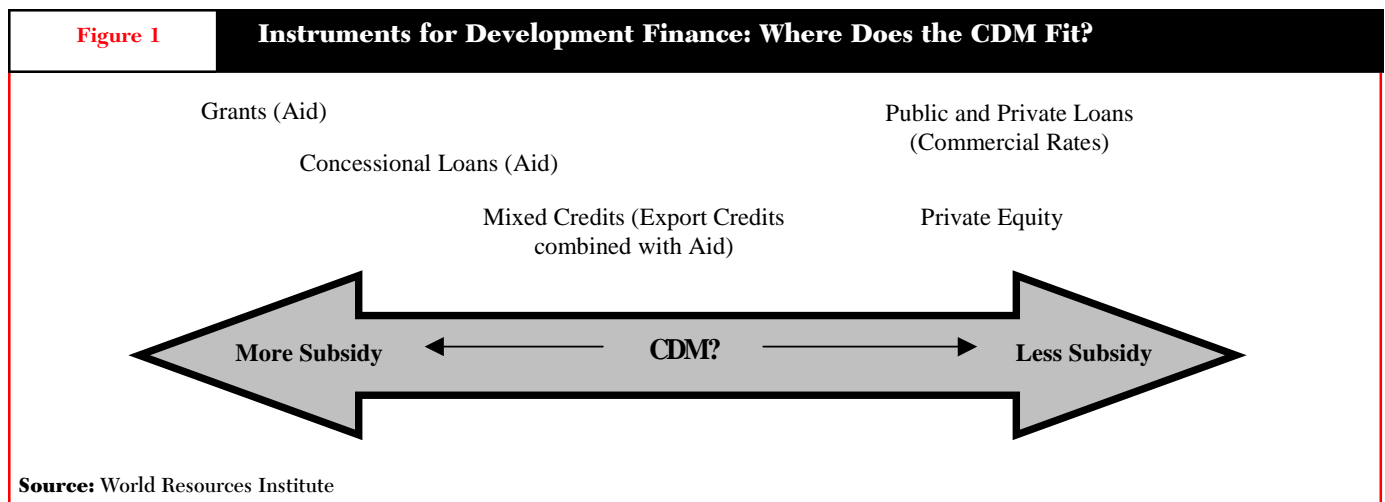
In principle, CDM projects could lie anywhere along the arrow in Figure 1, although the Kyoto Protocol negotiators may agree upon some restrictions. If the private sector alone is eligible to directly finance projects, then CDM lies with

FDI at the far right of the arrow. If export credits and other financial support for commercial projects can be combined, CDM projects would fall over most of the arrow, except the extreme left. If CDM projects can also be directly financed by aid, then they could fall anywhere along this arrow.

### Private Financial Flows

FDI has become the largest component of external financing to developing countries, dwarfing aid. FDI in developing countries has increased from \$24 billion in 1990 to \$171 billion in 1998 while aid (official development assistance and official aid) was \$58 billion in 1998.<sup>4</sup>

The vast majority of FDI to the developing world goes to a set of about 10 or so countries, with China, Brazil, Mexico, Colombia, Chile, Malaysia, Venezuela, Indonesia, Thailand, and India topping the list. These countries receive 75 percent of the total FDI going to the developing world, while representing about 60 percent of the total population in developing countries.<sup>5</sup> Box 2 lists the principal factors influencing foreign investment decisions and helps illustrate why private investment is concentrated in so few developing countries.



## PUBLIC FLOWS

The term “aid” encompasses both Official Development Assistance and official aid.

**Official Development Assistance (ODA)** is defined by the Organisation for Economic Cooperation and Development (OECD) as those flows:

- to developing countries and multilateral institutions;
- provided by government agencies;
- that have the economic development and welfare of developing countries as the main objective; and
- that are concessional in character, conveying a grant element of at least 25 percent.

**Official Aid** comprises flows that meet the tests of ODA, but are directed to more advanced countries in transition in Central and Eastern Europe, the former Soviet Union, and some high-income developing countries and territories.

Typical examples of ODA and official aid are loans and grants for education, health, energy, transport and communications, agriculture, industry, mining and construction, food and emergency aid, and debt relief.

**Other Official Flows** include transactions:

- by government agencies; and

- whose main objective is other than development-motivated, or if development-motivated, whose grant element is below the 25 percent threshold that would make them eligible to be recorded as ODA.

Typical examples of other official flows are loans and guarantees by official export credit agencies (financial institutions created by governments to promote exports and facilitate investments in riskier overseas markets), government equity and portfolio investment, and debt reorganization undertaken by governments on nonconcessional terms.

**Tied Aid** is grants, below market interest-rate loans, or other concessional financing that is conditional upon the procurement of goods or services from the donor country. The OECD rules prohibit tied aid to projects that:

- have a grant element of less than 35 percent (50 percent for least developed countries);
- are financially viable; and
- are in developing countries with a per capita GDP above \$3,030.

The term “tied aid,” however, is not confined only to “aid” (i.e., ODA and official aid). It may include any concessional financing by the government. For example, tied aid could take the form of a grant combined with an export credit (which, by definition, is not aid).

## PRIVATE FLOWS

**Foreign Direct Investment (FDI)** is defined as investment:

- made to a lasting management interest, usually at least 10 percent of voting stock, in an enterprise operating in a country other than that of the investor; and
- made with the purpose of having an effective voice in the management of the enterprise.

Typical examples of FDI are such corporate activities as businesses building plants or subsidiaries in foreign countries and buying controlling stakes or shares in foreign companies.

**Other Private Flows** include the following:

- Private debt (loans and bonds): loans from private banks and other financial institutions, and privately placed bonds;
- Portfolio equity flows: the sum of country funds, depository receipts, and direct purchases of shares by foreign investors.

**Sources:** OECD, Development Assistance Committee, *Glossary*, available online at <http://www.oecd.org/dac/html/glossary.htm>; OECD, “Ex Ante Guidance for Tied Aid” (Paris: OECD, 1996) available online at <http://www.oecd.org/ech/pub/exantee.pdf>; The World Bank, *Global Development Finance: Analysis and Summary Tables* (Washington, DC: The World Bank, 2000); The World Bank, *Assessing Aid: What Works, What Doesn't and Why?*<sup>9</sup> (Washington, DC: The World Bank, 1998).

- **Market size:** Size of the overall economy, rate of growth of gross domestic product, and population.
- **Political stability and government's role** in the economy, such as burden of government expenditures, tax rates, and the overall competence of civil service.
- **Income levels** and disparities between rich and poor, and rates of public savings.
- **Openness** to foreign investment, trade, and joint ventures, as well as exchange rate and profit repatriation policies.
- **Institutions:** Quality of legal institutions and practice (e.g., extent of corruption, vulnerability to organized crime, enforcement of contracts).
- **Finance:** Perceived stability and solvency of financial institutions, credit ratings given by outside observers.
- **Infrastructure:** Quality of roads, communications, and technology, among others.
- **Labor costs,** efficiency, and competitiveness, including basic education and skills.

**Sources:** Adapted from *The Global Competitiveness Report 1999* (Geneva, Switzerland: World Economic Forum, 1999): 96; UNCTAD, *World Investment Report 1999: Foreign Direct Investment and the Challenge of Development* (New York: United Nations, 1999), Overview; OECD, *Foreign Direct Investment and the Environment* (Paris: OECD, 1999): 25.

### Public Financial Flows— Aid and Other Official Flows

Flows from the public sector are divided into two categories: aid, and other official flows.

Aid comprises both official development assistance (ODA) and official aid.<sup>6</sup> Unlike the dramatic rise of FDI, aid flows have stagnated and even declined over most of the past decade, in both absolute terms and as a percent of donors' gross national product (GNP). Figure 2 shows this declining trend of aid, with a slight recovery in 1998. Not surprisingly, the countries that are heavily dependent on aid (with a high aid/GNP ratio) are also those that attract very low levels of FDI. A majority of these countries are located in Africa.

The second category of public money is called "other official flows." These flows, which reached \$13.8 billion in 1998, in-

clude official export credits from industrialized countries to developing countries.<sup>7</sup> Export credits are relevant to the CDM financing questions since they are frequently combined with aid to finance specific projects. Furthermore, many of the arguments in favor of allowing aid to support CDM projects mirror directly the rationale for the existence of official export credits and are, therefore, subject to the same concerns and criticisms.

### Public Financial Flows— Tied Aid

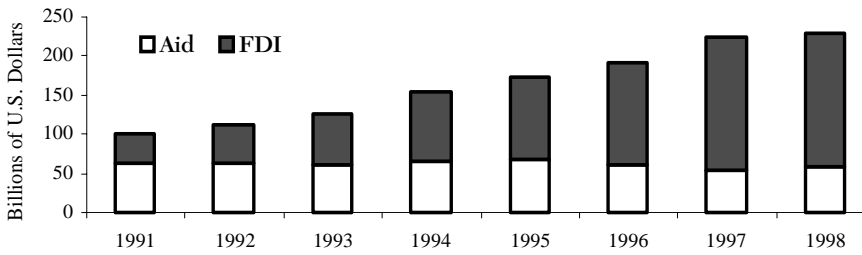
The various public sector financial flows, discussed above, can be tied to requirements that the recipient purchase equipment or services from the donor country's companies. Generally, this practice of "tied aid" has a pernicious effect on development assistance. The World Bank estimates that tying aid to the procurement of donor country goods and services reduces the value of

that aid by around 25 percent, compared to using local sources or international competitive tender.<sup>8</sup> Tied aid can be grossly inefficient as development agencies may supply incompatible equipment that requires replacement parts and repair services unavailable in developing countries. In addition, it encourages a donor-driven approach to development, signaling that development agencies' major concern is not development, but their national economic interests.<sup>9</sup>

Tied aid also introduces serious market distortions, especially in the international competition for capital and infrastructure projects. These distortions are exacerbated by the fact that, in many countries, firms have uneven access and capacity to compete for financial support from the government, such as from export credit agencies. Thus, some of the U.S. renewable energy firms, for example, seek to remove bilateral tied aid by all countries.<sup>10</sup>

For these reasons, since the 1960s, OECD governments have been working together to restrict the practice of tied aid.<sup>11</sup> Various OECD agreements prohibit tied aid to projects that (1) have a grant element of less than 35 percent (50 percent for least developed countries);<sup>12</sup> (2) are financially viable;<sup>13</sup> and (3) are in higher income developing countries. These requirements are designed to make tied aid very expensive and, thereby, discourage it. Among the OECD members, so far only the United Kingdom has unilaterally decided to untie all its overseas aid.<sup>14</sup> Most industrialized countries continue to practice tied aid to some degree, varying in their tolerance for using taxpayer-money to subsidize private sector exports.

**Figure 2** FDI and AID Flows to Developing Countries



Sources: FDI data from The World Bank, *2000 World Development Indicators* on CD-ROM (Washington, DC: The World Bank, 2000) and Aid data from OECD, *Statistical Annex of the 1999 Development Cooperation Report* (Paris: OECD, 2000) available online at <http://www.oecd.org/dac/html/dacstats.htm#Dactables>

Finally, the tied aid agreements are essentially legal exceptions to the World Trade Organization's Subsidies Code, which in general prohibits countries from subsidizing exports so as not to distort market financing. Thus, the subsidies code or the tied aid agreements may apply if OECD governments use aid funds or official export credits to finance CDM projects.

### III. THE CASE FOR AID-FINANCED CDM PROJECTS

The case in favor of aid-financed CDM projects rests on four arguments.

#### *Aid and the CDM have consistent objectives*

Although aid caters to a much larger segment of developing countries' needs than the CDM, both aid and the CDM seem quite consistent and potentially complementary. Just as with aid, the CDM has an "official" character—Article 12 of the Kyoto Protocol says that public entities may "participate" in CDM projects, including "in the acquisition of certified emission reductions." Their objectives are also similar. Economic development and welfare—the

objective of aid—is increasingly considered to be synonymous with sustainable development, one of the two objectives of the CDM. The development policy of the United States, the European Community, and other donor countries emphasizes coherence between social development and sustainable use of environmental resources. Thus, these two characteristics of aid match well with those of the CDM. It is the concessional character that makes the issue controversial, as discussed below.

Aid continues to be a major source of financing for such public interest activities as health, education, and environment. As the pace of globalization accelerates, safeguarding the global commons and fighting against environmental degradation becomes increasingly difficult. Challenges of this magnitude require concerted intergovernmental efforts and substantial financial resources, as well as a strong emphasis on policy coherence. Inadequate responses to environmental issues have had a demonstrably negative impact on economic development and poverty reduction.<sup>15</sup>

Given the relatively consistent objectives of aid and the CDM, shouldn't developing countries be allowed to state their own priorities, and decide how they want to use the aid they receive? Delegates from Australia have suggested the following: "Article 12 of the Protocol provides for the participation of public and private entities in the CDM and it is therefore appropriate that CDM project activities can proceed with public and/or private funding. Given this context, Australia is not opposed to the use of ODA to enable and facilitate CDM project activities. It is important that CDM modalities and procedures are developed in such a way that CDM achieves its full potential. *Ultimately, the host country is best able to judge whether a CDM project is consistent with its sustainable development priorities.*"<sup>16</sup> The language ("enable and facilitate" CDM project activities) is still ambiguous, but it appears to support aid-financing of CDM projects or purchasing of CDM credits, if developing countries so choose.

#### *Countries that cannot attract FDI will be excluded from CDM unless aid finances their projects*

The majority of developing countries might attract little or no CDM investment, given their own limited capacities to generate and negotiate projects under the CDM.<sup>17</sup> Thus, the second argument in favor of using aid to fund CDM projects is to bring the mechanism to poorer regions of the world that might not see any projects if the private sector were the only financier. This matches with one of the fundamental characteristics of aid, concessional financing, which could be exactly what is needed to foster climate-friendly projects in developing countries.

Of the \$58 billion of aid in 1998, over half went to the less developed countries with the lowest incomes (per capita GNP less than \$785 in 1997).<sup>18</sup> If the private sector alone can invest in and finance CDM projects, CDM may well follow the track of FDI and concentrate in ten of the largest developing countries, denying the poorest of these countries an opportunity to benefit from this new instrument. Indeed, most economic models of CDM flows estimate almost all projects to be located in just three countries—China, India and Brazil—largely because investment opportunities are the greatest there.<sup>19</sup>

***Renewable energy and other advanced technologies might need subsidies to compete under the CDM***

A third argument in favor of aid-financed CDM projects is that some climate-friendly projects have characteristics that make it difficult to secure conventional financing. The projects are less attractive because of high development costs, large “soft” components (i.e., feasibility studies, energy audits, hiring consultants, and conducting training programs), small size of investments, higher transaction costs, and higher overall risk. Project financiers are reluctant to finance small projects and seek investments involving well-developed and proven technologies with clear risk-return profiles. In several financial markets, such as in Mexico, sharp restrictions on liquidity have compounded the underlying reluctance of bankers to consider lending for projects outside of a narrowly defined set of project criteria.<sup>20</sup> In addition, short repayment terms on loans add to the barriers in implementing projects such as renewable energy projects and might

make them commercially nonviable. Aid could help overcome such barriers.

***It is important to “green” public financial flows***

Finally, while the CDM holds some potential to green private financial flows, it can also provide incentives for shaping more climate-friendly public sector investments. A recent study by the Sustainable Energy and Economy Network concludes that the anticipated benefits from the CDM are vastly outweighed by the continued transfer of public money from industrialized countries to developing and transition economies for fossil fuel projects.<sup>21</sup> The report finds that if only 20 percent of the financing by four public institutions—the World Bank Group, the European Bank for Reconstruction and Development, and the two U.S. export credit and investment agencies<sup>22</sup>—were diverted away from fossil fuels toward investments in energy efficiency and renewable energy, the emissions avoided each year would have equaled more than one-and-a-half times the amount of carbon averted under a best case scenario for the CDM. Some, but not all, of these public sector flows are classified as aid.

The contribution of bilateral aid to carbon emissions is less evident. On the one hand, for some governments, aid to energy projects in developing countries is significant. The CDM could provide incentives to minimize the carbon footprint of those aid flows, while still delivering social and economic development benefits. On the other hand, bilateral aid flows should not be equated with project finance. Much aid pays for consultants, project preparation, planning, and capacity building. It should further be noted that emissions growth

is inevitable in many least developed countries, and some of the aid flows to carbon intensive sectors already support climate-friendly projects, such as renewable energy.

**IV. THE CASE AGAINST USING AID TO FINANCE CDM PROJECTS**

The case against aid-financed CDM projects also rests on four arguments.

***Financing CDM with scarce aid funds diverts aid from more pressing development needs***

Developing countries and development experts fear the CDM could divert aid toward credit-generating activities and away from higher development priorities, such as fighting the problems of low per capita income, high rates of population growth, infant mortality, malnutrition, and illiteracy. For example, even with respect to the countries most vulnerable to climate change impacts, an evaluation of the European donors’ cooperation policies and practices toward small island developing states revealed that climate change is not high on the agenda of all developing countries.<sup>23</sup>

Every donor agency is now talking about “ownership” of the development process, whereby recipient countries develop their own strategy, rather than follow donor-driven practices. Yet, this fails to address the broader concern about major shifts in donor priorities. Donors could shift development aid away from basic poverty programs in the least developed countries toward supporting more climate-oriented projects in middle income aid recipients. Although aid flows could and should be more climate-friendly, as was also ar-

gued in the previous section, donors should not unilaterally impose extra costs and conditions on their developing country partners.

At present, many stakeholders and government officials in industrialized countries are concerned about the potentially high costs of meeting the Kyoto Protocol targets, and aid agencies are always under pressure to advance national commercial interests. The CDM creates a new benefit that can be particularly attractive to companies and countries that perceive their domestic cost of controlling greenhouse gas emissions as excessive. Indeed, a rationale for the creation of CDM is to reduce treaty compliance costs for industrialized countries.

If industrialized countries are allowed to use their aid funds for CDM projects, it might be difficult for them to resist either subsidizing their domestic CDM investors or purchasing CDM credits directly on the open market. In fact, resistance might be hard to justify, given the pressure from legislators and their colleagues in trade, industry, or commerce departments to advance their private sector interests overseas under the umbrella of aid. So, climate negotiators should not encourage such a shift in aid priorities toward earning CDM credits.

***Developing countries that want to make CDM a priority need help building both private and public sector capacity to compete for projects more than they need aid financing for projects***

Political, institutional, and policy-level inefficiencies constrain developing economies and prevent them from taking full advantage of opportunities, such as the steep growth in private develop-

ment finance or international processes like the CDM. In order to benefit from such opportunities, developing countries need support for human and institutional development that is rooted in transparent and accountable governance systems and coherent policies. Developing countries need scientific and technical know-how, educational and informational services, and organizational and managerial skills to ensure that they benefit from the CDM. For some countries, building these capacities can be very expensive, even unaffordable.

Since the 1960s, building human and institutional capacity has been a goal of the international donor community. In the 1980s, when it became clear that many developing countries, particularly in Africa, did not have the management skills and organizational resources required to implement complex adjustment programs, donor agencies embraced capacity development as a prerequisite to achieving sustainable development.<sup>24</sup> The need for capacity development around the CDM reinforces the general capacity building need of developing countries.

Delegates to climate negotiations have already identified a number of capacity building needs related to the CDM. These include project identification, baseline development, project formulation and design, monitoring, verification, auditing and certification of project activities, and project negotiation skills. Another area for support is in establishing criteria for evaluating proposed projects, including indicators of sustainable development impacts and adaptation needs. Climate negotiations are currently discussing a capacity building package that contains CDM

demonstration projects to enhance learning-by-doing, including assessment of long- and short-term costs and risks, and data acquisition and sharing.<sup>25</sup> Elements of this package will likely need financial support from donors. So even within the realm of the CDM, there are better uses for aid than financing projects or purchasing credits. Use of aid funds for capacity development, along the lines mentioned above, would vastly improve the prospects for private sector financing.

***There is no easy way to ensure that aid-financed projects use “new and additional” resources***

A number of governments and observers have suggested that aid-financed CDM projects would be acceptable, provided that the money is “new and additional” to existing aid. In 1998, the G-77 and China asked how it will “be ensured that financing for CDM projects shall be additional to aid and other international funding” obligations. In response, both the European Community (with Switzerland) and the United States asserted that these issues would not arise because the CDM will primarily be a vehicle for private sector investment.<sup>26</sup> In 1999, the European Community stated that if public funds are used, project participants must provide information on the funding of the project activity, proving that CDM investment will not result in a diversion of, or competition with, funds for ODA and the Global Environment Facility.<sup>27</sup> To date, at least two industrialized countries—Japan and Australia—still support the use of aid to finance CDM projects, so the question of aid additionality is still under consideration.

Experience has shown that there is no practical way of ensuring an aid additionality test. Nascent CDM activities and five years of experience under the “activities implemented jointly” pilot program, the precursor to the CDM, have shown that additionality tests require a baseline, or reference case, to be meaningful. Thus far, no baseline has been discussed for aid. Such a baseline is also difficult to construct because aid budgets are typically not decided until the national budget for the coming year is agreed on. Furthermore, aid is a voluntary commitment of developed countries. No legal rule exists that ensures that developed countries provide a fixed percentage (or amount) of their national incomes for aid.

The only feasible aid baseline would be 0.7 percent of a country’s GNP, a goal pledged by the industrialized countries at the 1992 Earth Summit. In fact, as long ago as 1970, the U.N. General Assembly adopted the resolution that called upon each economically advanced country to “progressively increase its official development assistance to the developing countries and . . . exert its best efforts to reach a minimum net amount of 0.7 percent of its gross national product at market prices by the middle of the decade.”<sup>28</sup> Although this could have been an objective benchmark from which to judge such an additionality, only four countries—Denmark, Norway, Sweden, and the Netherlands—have reached this goal. In general, net aid has been declining in terms of aid/GNP ratio, falling from 0.42 percent in 1991 to 0.26 percent of the combined GNP of donor countries in 1998.<sup>29</sup>

### *Aid financing of CDM projects would likely lead to more tied aid in the face of international efforts to restrict it*

One justification for tied aid is the belief that to maintain political backing for foreign aid programs, aid needs to benefit domestic business constituencies.

*Experience has shown that there is no practical way of ensuring an aid additionality test.*

Japan, for example, has argued that “certain percentage of yen loans need to be tied in order to avoid a loss of public support for Japanese aid itself in the current tight fiscal situation.”<sup>30</sup> It is also argued that aid can stretch private sector financing, leading to greater overall investment. In discussing whether aid should finance CDM projects, Japan has used similar logic to support its view that aid should be allowed to earn CDM credits. During the September 2000 climate change negotiations in Lyon, France, Japan’s ambassador expressed his country’s intention to use aid for the CDM. He argued that in doing so, Japan would boost private sector investment through cofinancing.<sup>31</sup>

As previously discussed in Section II, tied aid is extremely controversial and problematic. It is increasingly restricted under international agreements among donor countries. Tied aid allows donor countries to use their aid funds to subsidize favored suppliers, providing below-market finance to promote exports and support domestic companies. CDM projects supported by tied aid could force the recipi-

ents to accept what donors provide rather than what they really need. Allowing industrialized countries to use aid to finance CDM projects could further fuel donor-interest to tie aid to domestic technologies, services, and companies.

In fact, a decision in favor of allowing aid-financed CDM projects would be tantamount to inviting another form of tied aid, whereby, funds will be tied to the receipt of carbon credits from a CDM project. This not only risks the corruption of the CDM market, but also could undermine or create a loophole in the already agreed tied aid restrictions.

## **V. ANALYSIS AND RECOMMENDATIONS**

Given the risks of aid tying and priority shifting, we conclude that limited aid resources should continue to be reserved for capacity and institution building and not be allowed to directly finance CDM projects or purchase credits. There is no practical way of ensuring that donor countries will not shift their aid away from the more pressing development needs of poor countries. It is quite plausible that at least some donor countries would redirect aid toward countries with projects that would help them meet their GHG emission reduction commitments. Since the point of using aid to finance CDM projects would be to earn credits for the companies of the donor countries involved, allowing the practice would undermine progress toward the phase out of tied aid.

We must, however, acknowledge that donor governments could still decide to support CDM through public funds

under the banner of other official flows, rather than aid *per se*. This is a definitional game, to some extent. Governments could lower their aid outlays and create another climate change fund, instead, if they so choose.

As for the argument that aid financing is necessary to promote renewable energy and energy efficiency projects, it is not likely that donor governments will reserve aid for these options. While some agencies, such as the United States Agency for International Development, support only clean energy and energy efficiency projects, most donors continue to use public resources to finance conventional energy projects. Many delegations to the climate talks have insisted on a so-called “technology neutral” CDM, meaning that coal, large hydropower, and any other projects can compete for CDM. Thus, there is no reason to believe that governments would only support renewable energy and energy efficiency projects with their aid funds. So, whatever extra help aid financing might give to renewable energy projects, it would likely help conventional projects more.

Given the focal need for capacity building in developing countries, the role of aid should be limited to those activities that would not earn CDM credits. Supporting human and institutional capacity development for managing a CDM program can have positive impacts in terms of general capacity building for development policies, thereby promoting an environment for investment in developing countries. Helping countries compete for CDM investment could build entrepreneurship and give local

people access to and ownership of projects. Such capacity development could, in turn, help leverage greater levels of investment from the private sector.

Although private investment would then be the main source of funding for CDM

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projects, developing country governments still have the responsibility to help shape attractive conditions for business and private capital flows. Costa Rica, for example, is taking climate change issues seriously and is turning the costs or threats into business opportunities such as ecotourism or infrastructure for CDM projects. Other countries have successfully created a market for climate-friendly technology by getting the prices right to incorporate environmental effects. Honduras illustrates how introducing an incentive to invest in renewable energy projects can discourage investments in fossil-fueled power generation. Thailand has reduced import duties by five percent for users of biomass and waste boilers to promote cogeneration.<sup>32</sup>

Finally, for many countries, the barriers to attracting CDM projects are structural. These countries still lack the necessary policies, laws, and governance structures that create incentives for a professional and entrepreneurial class to emerge and thrive, or for foreign investors to want to risk investing their capital. Aid is well suited to financially support both government and non-

governmental reformers, who can help bring about a more stable and transparent business environment. On the other hand, no amount of subsidized financing of individual CDM projects could overcome a poor business and investment climate in any sustainable way.

If countries remain convinced that direct aid financing of projects is vital to the CDM, then it should be narrowly reserved for countries that receive the lowest levels of FDI (say, below 0.5 percent of their GNP) or some other cutoff

designed to target the world’s least developed countries.<sup>33</sup> To avoid the inefficiencies of tied aid, these funds should be managed through multilateral funds, with a mandate to ensure competitive bidding. Donors should further agree to develop a set of guidelines to promote joint ventures, mentoring, and partnerships among industrialized and developing country experts to support positive learning and capacity building.<sup>34</sup>

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## NOTES

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10. The Solar Energy Industries Association lobbies to remove tied aid by all countries. Tied aid distorts the market and fosters unsustainable development. If countries want low cost lending for longer terms, they should support programs jointly via multilateral institutions. Scott Sklar, President, The Stella Group, Ltd., Washington, DC, personal communication, October 20, 2000.
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12. To be more precise, the "concessionality level" must be at least 35 or 50 percent. See Chapter III, paragraphs 37 and 38 of the *Arrangement* for more details (Note 11).
13. The 1996 *Ex Ante Guidance for Tied Aid* establishes criteria to determine whether a project is "commercially viable," and therefore ineligible for tied aid. The key test for assessing the commercial viability of a project is whether it generates cash flow sufficient to cover the project's operating costs and to service the capital employed. This is determined on a case-by-case basis. Generally, financially nonviable projects produce a public good, are capital-intensive with high per unit production cost, and create a product that local consumers are unable to afford at the market-determined price. Renewable energy projects, for example, can be considered commercially nonviable according to this description. See OECD, *Ex Ante Guidance for Tied Aid*, document number OCDE/GD(96)180 (Paris: OECD, 1996) available online at <http://www.oecd.org/ech/pub/exantee.pdf>.
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  29. “Donor countries” here refers to the members of OECD’s Development Assistance Committee. This committee establishes rules and guidelines on the use of development assistance. The data is from OECD, *Statistical Annex of the 1999 Development Cooperation Report* (Paris: OECD, 2000). For more data on the flow of financial resources from DAC members see online at <http://www.oecd.org/dac/html/dacstats.htm>.
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  33. The least developed countries are the poorest countries in the world. They are officially designated as “least developed” by the General Assembly of the United Nations, on the basis of a number of agreed criteria (such as per capita GDP, share of manufacturing in total GDP, the adult literacy rate, the augmented quality of life index, the economic diversification index, and population size). There are currently 48 of them. For more information, see the UNCTAD website <http://www.unctad.org/en/subsites/lcds/aboutldc.htm>.
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