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# EXAMINING THE ADMINISTRATION'S PROPOSAL TO ESTABLISH A MULTILATERAL CLEAN TECHNOLOGY FUND

## HEARING

BEFORE THE

SUBCOMMITTEE ON
DOMESTIC AND INTERNATIONAL
MONETARY POLICY, TRADE, AND TECHNOLOGY

OF THE

COMMITTEE ON FINANCIAL SERVICES
U.S. HOUSE OF REPRESENTATIVES

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# EXAMINING THE ADMINISTRATION'S PROPOSAL TO ESTABLISH A MULTILATERAL CLEAN TECHNOLOGY FUND

**Thursday, June 5, 2008**

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON DOMESTIC AND
INTERNATIONAL MONETARY POLICY,
TRADE, AND TECHNOLOGY,
COMMITTEE ON FINANCIAL SERVICES,
*Washington, D.C.*

The subcommittee met, pursuant to notice, at 1:40 p.m., in room 2128, Rayburn House Office Building, Hon. Luis V. Gutierrez [chairman of the subcommittee] presiding.

Members present: Representatives Gutierrez, Moore of Wisconsin, Clay; and Paul.

Ex officio present: Representative Frank.

Chairman GUTIERREZ. This hearing of the Subcommittee on Domestic and International Monetary Policy, Trade, and Technology will come to order. Good afternoon and thank you to all of the witnesses for agreeing to appear before the subcommittee today.

Today's hearing will focus on the Bush Administration's proposal to establish and provide funding for a multilateral Clean Technology Fund. We will hear more detail from Mr. McCormick today, but the Administration has indicated that the purpose of the Clean Technology Fund will be to "help fund deployment of clean technology to reduce greenhouse gas emissions in major developing economies."

As envisioned by the Administration, the multilateral Fund would exceed $10 billion in total funding and would be administered by the World Bank. President Bush is seeking authorization from Congress for a U.S. contribution of $2 billion over 3 years, starting with a $400 million appropriation in Fiscal Year 2009.

With our jurisdiction over international financial institutions, including the World Bank, the subcommittee and the full Committee on Financial Services will be responsible for any funding authorization.

Testifying on our first panel today, we have David McCormick, Under Secretary for International Affairs at the U.S. Department of the Treasury. Our second panel is made up of representatives of several international environmental organizations, whom I will introduce later in the proceedings.

We will be limiting opening statements to 10 minutes per side, but without objection, the record will be held open for all members' opening statements to be made a part of the record.

I understand that Under Secretary McCormick is under some time constraints, so in order to expedite this process, I will submit my opening statement for the record and recognize Mr. Frank, the chairman of the full Financial Services Committee.

The CHAIRMAN. Thank you, Mr. Chairman.

I appreciate this. I am not going to be able to stay for the whole hearing, so I do want to make my statement now.

First, I think it is a sign of progress that everyone should welcome that this proposal comes to the Administration. We progress at different rates, but progress still should be noted.

The fact that we have here a proposal from this Administration to put funding behind clean technology is, of course, based on the recognition that climate change is a serious issue and that significant improvement in environmental impacts are a very, very high priority.

There are some concerns that have been expressed that we need to address. To begin with, we should be clear that part of the problem here is that we don't come free of history. Historically, the World Bank has not been seen as an institution which is friendly to environmental concerns.

Now, I think progress has been made here as well, and there have been substantial improvements. In some cases, this committee has played a role in that, for example, in our insistence on the establishment of inspection panels, which have contributed.

But part of the problem that remains is the concern about the World Bank being the most suitable entity to do this.

People want to see some movement forward here, but we can't always get what we want. The choice may be, given the reality between the World Bank and nothing, there may be some argument for doing it elsewhere. But then there is a second set of issues which is, if it is going to be the World Bank, under what conditions, and subject to what rules?

I do think, if this is going to work, it is going to be incumbent upon the Administration and the Bank to allay fears that are well-grounded in history, that are not paranoia, and I think there is the burden of proof to be shown that the Bank will take this mandate and do it in a way that significantly improves the situation.

Another concern is that we don't really do enough in this world, and this country does not do nearly enough, to alleviate poverty. There are far too many malnourished children in this world, proportionately more in Africa than elsewhere, but an awful lot, for any of us to feel good about it.

Any suggestion that these funds would be diverted from public remediation and economic development in general will also be a severe obstacle. So we are going to need some very strong commitments that this will be wholly additive.

I say that because we are in a situation where, when we draft our budget, we are sometimes told—I guess, by "sometimes," I mean once every year—by the Administration that here is an absolute dollar limit above which we cannot go.

We say, if these funds are going to come out of an already too constrained budget for development purposes, then there is an obstacle to that. Unless we can get an agreement that these will be additive and will not come at the expense of other issues, again, I think, this does not go forward.

There are some more fundamental issues about what types of technology would be dealt with, but assuming it is going to go to the World Bank—and that is obviously by no means guaranteed—those two are absolutely minimum conditions. Assurances that this will be done well and a guarantee that there is no diversion, and I would say that finally, one way in which you do that is to shorten the period in which it is allowed to go forward.

So, at this point, I think the shorter the authorization period, the more we may feel that we will be able to see whether or not this works.

Obviously, you do have, at some point—you need a longer term to get projects going. But that wouldn't be an argument in the first year because you are not going to be making huge commitments in the first year. So I think there is going to be an argument strongly that many of us will feel that, given the sort of experimental nature of this, we should not have a very, very long time in which it is authorized, because whatever assurances we get now on the two points I mentioned, they are only assurances, and we can't take them literally to the Bank, even if we get them from the Bank.

So, what I think people may look forward to is a testing period of a year or so in which the two points that I mentioned will have to be established if this is to go further.

I thank you, Mr. Chairman.

Chairman GUTIERREZ. Thank you, Mr. Chairman.

Our first panel consists of only one witness, Mr. David McCormick. Mr. McCormick is the Under Secretary for International Affairs for the U.S. Department of the Treasury. We welcome him and ask him to please proceed.

## STATEMENT OF THE HONORABLE DAVID H. McCORMICK, UNDER SECRETARY FOR INTERNATIONAL AFFAIRS, U.S. DEPARTMENT OF THE TREASURY

Mr. MCCORMICK. Thank you, Chairman Gutierrez, Congressman Paul, and members of the committee. Thank you for the opportunity to discuss an issue of global importance with you today, and that is the Clean Technology Fund, also referred to as the CTF.

The CTF is a new multilateral effort to reduce the growth of greenhouse gas emissions in developing countries by financing the additional cost of deploying clean technologies over dirtier, usually cheaper, alternatives. The President's Fiscal Year 2009 budget includes a $400 million appropriations request for the initial U.S. contribution to the CTF, which will be housed at the World Bank where it will leverage the capital bases of multilateral development banks and the donations of other contributing countries. The Administration has requested authorization from Congress to commit $2 billion to the Fund over the next 3 years.

We are aiming, along with our donor partners in the G8 and beyond, at a global effort of up to $10 billion over the next 3 years, with the United States as the lead donor.

Now, what is the problem we are trying to solve here? Let me outline for you the magnitude of the problem that this new multilateral aims to address and why it is so critical that the United States be a part of it.

Since 2002, emerging and developing economies have been responsible for about two-thirds of global GDP growth. While this unprecedented expansion has brought economic opportunities and higher standards of living to desperately poor people from around the globe, it has also led to a surging demand for energy. That energy has come in the power industry in the transport, building, and industrial sectors.

According to the International Energy Agency, by 2030, global demand for energy will have increased by over 50 percent, with almost three-fourths of this increase coming from a handful of developing countries. Now, currently, most developing countries are focused on the most cost-effective way to grow their economies, feed their people, and raise their standard of living.

They tend to invest in the available energy technology that can provide the most economic impact at the least cost. But each time they invest in dirty technology, such as a subcritical coal plant with a 30-year life span, the harder and more expensive it will be to mitigate the resulting climatic effects in the future.

If we take no action to provide developing countries with the right incentives, their investments today could lock in the legacy of high-polluting, less-efficient technologies for which we would all eventually pay through the accelerated efforts of climate change.

What is the response? Well, in response to this global challenge, the United States, the United Kingdom and Japan have been working multilaterally with the other G8 countries and potential donors to create an international Clean Technology Fund to help developing countries deploy these commercially available technologies. These are technologies that we in the United States and Japan and other developed countries are already using.

Since September of 2007, Secretary Paulson, at the request of the President, has led U.S. efforts to negotiate the development of the Fund with our international partners.

The proposed Clean Technology Fund has three objectives: first, to reduce emissions growth in developing countries through the accelerated deployment of existing commercially available clean technologies; second, to stimulate and leverage private-sector investment in these existing technologies; and, third, to promote international cooperation on climate change in the broader context of pursuing a future climate change agreement.

The Clean Technology Fund will help developing countries finance the additional cost of deploying clean technologies over dirtier ones. The Clean Technology Fund will not cover the entire cost of any project. It will help cover the portion of the cost needed to reach the point of economic viability. National governments and private sponsors will be responsible for the bulk of project financing.

The Clean Technology Fund will be a multilateral fund administered by the World Bank and implemented through all the multilateral banks. It will be able to leverage the resources of the MDBs, which collectively lent over $55 billion in 2007 for international development. The Fund will invite developing countries with an emphasis on those with expected high emissions growth, and they will be invited to submit requests for CTF support to finance energy, transport, or other projects with significant emissions reduction potential, including large-scale energy efficiency projects.

To be eligible to receive such funds, developing countries will be required to work with the World Bank to develop investment strategies that are based on national plans for low carbon growth. Projects would be evaluated based on their consistency with these national plans, their expected reduction of greenhouse gas emissions, and their capacity to transform sectors onto cleaner energy pathways. The Fund will use a mix of concessional loans, grants, equity investment, and credit guarantees to finance any additional cost of deploying clean technologies.

Mr. Chairman, the status of the Fund—we have talked to many other countries. The United Kingdom and Japan already expressed publicly their contribution or their willingness to commit, and we recently had a CTF design conference in Germany where potential donor and recipient countries came together and reached general agreement on the parameters of the Fund. We believe donor support will go well beyond the G8 to include a number of countries in Europe and throughout the Middle East.

A final comment, Mr. Chairman, for U.S. leadership and involvement, I believe the CTF will do more than make an immediate impact on emissions growth in the developing world. I believe it can contribute to building the kind of trust between developed and developing countries, trust that I am sorry to say has been lacking for some time, that will be necessary for a new U.N. climate arrangement to be reached in the years ahead. Thank you very much.

[The prepared statement of Under Secretary McCormick can be found on page 47 of the appendix.]

Chairman GUTIERREZ. Thank you very much for your testimony.

Mr. McCormick, I only have one question. There is significant concern in the environmental community regarding the lack of a definition of "clean technology" in the Administration's proposal. Has Treasury ruled out certain technologies and projects that others might be pushing for eligibility under the CTF?

In other words, are there technologies or projects that some might promote as clean or transformational that would not, in your view, be appropriately funded by the CTF? What about the supercritical coal plants?

Mr. MCCORMICK. Thank you, Mr. Chairman.

The projects that would be considered, first, would only be those projects from countries that had already developed and had the approval for national plans for reaching low-carbon economic growth.

Within that continuum of projects, we would expect that there would be a number of those projects that would be retrofitting existing infrastructure, trying to make existing infrastructure, whether it be buildings or transportation networks, much cleaner.

We would also expect that there would be some of the projects that we would consider which would be new energy infrastructure. Within that new energy infrastructure there may, in some instances, be proposals for coal-related technologies.

In those instances, those projects would be considered. I wouldn't expect that to be a significant portion of the portfolio, but it might be part of the portfolio. This, I think, does bring to the forefront a difference among many here. From a very practical standpoint, in some of these developing countries, they are moving forward with the development of coal-fired plants.

The only question, really, is whether we may, in certain circumstances, within the context the of a low-carbon plan that they have agreed to, finance the deployment of the cleanest available coal technology possible, but those economies are going to develop, in some cases, coal infrastructure with or without our support.

We think there may be cases that do, in fact, justify the deployment of the cleanest available coal technology possible, just as we would advocate that under certain circumstances in our open country.

Chairman GUTIERREZ. Thank you, Mr. Under Secretary.

The ranking member, Dr. Paul, is recognized for 5 minutes.

Dr. PAUL. Thank you, Mr. Chairman.

Programs like this are always based on the assumption that without a program like this, no good can come of it; there is no other alternative, that there is never a market force, there is never a profit incentive to accomplish some of these goals.

There is also the fact that some of these programs, if not most of them, programs of the multilateral development banks, aren't always that successful. Sometimes there is a lot of money wasted, and there are a lot of special interests who benefit.

It is always designed to do good to help the poor and to clean up the environment, but sometimes we know that it feathers the pockets of some special interests. Of course, I have always had concerns about that.

The other thing, of course, that we shouldn't ignore is the cost of a program like this. We are talking about just a piddling sum, you know, $2 billion, throw that out there. That is not much in a big budget. But we never talk about where the money is coming from, and I would like to find out what the Administration is thinking. Is this going to be part of the deficit? Is this going to be borrowed money, or is this going to be paid for by taxes?

For a $2 billion program, the odds are, it will be a lot more. So, could you tell me, has anybody considered how we are going to pay for this, and what we should do? What are the considerations on paying for this?

Mr. MCCORMICK. Congressman Paul, thanks for that question.

We certainly, I think, have a common agreement on the commitment to market forces, and in the area of the environment, particularly in the area of greenhouse gas emissions, that has typically been pointed to by many as a public goods issue, where we don't have market forces that are essentially operating at some of these developing countries where there is enough of an incentive for the investment in the cleanest available technologies possible.

The reason for that is these governments are making trade-offs in some cases—not in all cases—between basic human needs and incremental investment in clean technology, and they are making a trade-off that ultimately means dirtier technologies, which creates the public goods problem for us all. So that is what the Fund is designed to highlight.

As Chairman Frank noted in his opening remarks, we are committed to this not being a trade-off between ODA funding, existing ODA funding for poverty reduction and environmental funding, so it is, indeed, additive. And it would be part of the overall President's budget. It is additive to our development funding.

I recognize your concern, Mr. Paul, with overall deficit concerns and deficit spending. I can't point to a specific trade-off that is being made within the budget as a consequence of this or a specific tax, but I certainly do note your concern on that point.

Dr. PAUL. Yes, and I think this is probably typical. You know, the programs get started, and we don't pin it down, and it does contribute. You have a program here and there, and soon we have a national debt increase. This year, the national debt increase could be three-quarters of a trillion dollars at the rate we are going. It is close to 600 now.

So if the economy continues down, it could be a major factor.

But back to this idea about the market, you argue that, you know, in these circumstances, the market isn't available and doesn't work. Well, that almost guarantees bad decision-making because instead of picking and choosing, let's say, nuclear over wind and all these difficult things, if you don't have a market factor in there, somebody has to make the decision, and it has to be a bureaucrat. It has to be a politician, and it is going to be slower, and it is going to be more costly.

So I guess, from what I am saying, I lack enthusiasm and belief that something like this can be successful, although, politically, it has a lot of appeal. I understand this, but I would caution everybody that someday we, as a country, will have to wake up and be responsible for paying these bills.

Thank you.

Mr. MCCORMICK. May I respond?

Chairman GUTIERREZ. Yes, if you would like to respond.

Mr. MCCORMICK. Certainly I think part of the issue here—and I recognize $2 billion is a great deal of money. However, within the overall scheme of this gap, between existing infrastructure that is being deployed today, just in the energy sector alone, it is $30 billion. That is the differential in cost between the technology that is being deployed and the cleanest available technology.

So if you think about the global implications of that from a carbon emissions standpoint, it is quite enormous. While $2 billion is a lot, it is, frankly, just a fraction of addressing the overall problem.

Now, why we think this $2 billion is a worthy investment for the taxpayers is because the $2 billion becomes $10 billion, hopefully, if we are able to get multilateral support for it, and then is leveraged much more significantly than that by the fact that private-sector investment comes into this further, the countries' investment.

So I don't mean to suggest market forces won't be at work here. They will be, because companies will compete for projects. Projects will complete among themselves for funding opportunities.

I am simply saying the market is not working today in terms of helping countries make that trade-off because they are opting to address near-term poverty needs as opposed to the long-term implications of global warming. That is something we have a common interest in addressing as Americans.

Thank you.

Chairman GUTIERREZ. Congressman Frank. Please, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Chairman.

I won't intrude into a family dispute over the market between the gentleman from Texas and the Department of the Treasury, but I am interested in the budgetary implications. You were asking for a $400 million appropriation.

Now, if I am correct, this is different than our usual financing of World Bank activities with the lending and leveraging, etc. There is leveraging in that we expect others to contribute, but this is a dollar-for-dollar appropriation, correct?

Mr. MCCORMICK. Yes, Mr. Chairman.

The CHAIRMAN. This is money, unlike World Bank or other IFI funds that we have the dollar-for-dollar out-of-pocket spending, so you can assure me that the $400 million being requested is purely additive to what was otherwise being requested in the foreign aid budget?

Mr. MCCORMICK. Yes, sir, Mr. Chairman.

The CHAIRMAN. Okay, the reason it is important for this to work is that—and I know a couple of the witnesses mentioned this as well—this is money that is going to be spent in middle-income countries, because poor countries are too poor to bother the environment very much, certainly not from their emissions.

So we have the continuing scandal of starving children in Africa. This is not money that is going to go to Africa. It is not money that will go to the poorest countries, so that makes it especially important that we be very clear about that, and I will be talking to the budget and appropriation people.

And I will tell you, I am ready to support this if we work this out—the way this would probably work is, if we do agree with it, we will be recommending it, in effect, if we pass it out of the Financial Services Committee, to the Foreign Operations Subcommittee.

But I will be prepared to tell them that if they get into a budget crunch with the Administration and we are told we are spending too much, you go over this side first. I want to be very clear about that. I am prepared to support this but not at the expense of poverty alleviation. I don't like to have to make that trade-off, and I hope I am not forced to. You know, we do this, but my advice to the Foreign Operations people will be, okay, if you can do it that way.

Then the other issue I would raise is—and I noticed this in some of the testimony—one of the things that could make it easier for us to get this done would be—you know, we talk about trade-offs. The World Bank has not compiled a record that most environmentalists approve of in its general operations, and there is a dan-

ger that we would have an ongoing World Bank operation that was not environmentally sensitive, and then this, you know, it is like they do their environmental work 1 day a month, and then they undo it the other 29 days.

A commitment from the World Bank, or a commitment from us to work to see that the World Bank does better on environmental issues, in general, could be very helpful. That is, again, why, I think we may be talking about a trial period here.

But that would be important, that the World Bank not be funding projects, for example, that would go counter to a concern for clean technology. I think that is another issue that we would ask you to address and that we may address when we legislate on this.

Now, let me ask you, one of the most controversial questions, controversial within this body as well, and that is clean coal. What is your sense about that, because that is probably the issue that causes the most controversy, because it causes it within this body as well?

I would say to my environmental friends, obviously, there is not yet a consensus here on the issue the way they would like, but what would your sense be, would a significant amount of this go to clean coal, some part? What is your sense?

Mr. MCCORMICK. Mr. Chairman, thank you.

First, just a word on the Bank. I think I would be the first to admit that there is a real tension in the Bank's poverty reduction mandate and also a growing prioritization within the Bank on an environmentally friendly energy and, in particular, climate change. I know President Zoellick has made this one of his top six priorities.

And what you should take confidence in from the Fund is that, unlike other funding mechanisms at the World Bank, we would have, as the United States, as one of the members of the Fund trust committee, an ability to veto any project that is inconsistent with a mandate that we are discussing today.

The CHAIRMAN. Well, I appreciate that, Mr. McCormick.

And I mean no personal disrespect, but the fact that this Administration has a veto does not always fill me with joy.

Mr. MCCORMICK. Understood, Mr. Chairman.

The second point is that, I think within these projects that would be funded, there is absolutely—and our friends from the NGO community have reinforced the importance of this many times—there needs to be a focus on retrofitting existing infrastructure, on efficiency and those types of projects, every bit as much as new infrastructure. Within the category of new infrastructure—

The CHAIRMAN. You mean, the ongoing activity of the World Bank and the other MDBs, that this would have to be accompanied by some sensitivity there.

Mr. MCCORMICK. Yes, sir, and also within the Fund.

The CHAIRMAN. I understand that, but if this is confined only to the Fund, you will run into trouble. One of the ways you can help is if a trade-off for the existence of the Fund is some more sensitivity within the main operation as well.

Mr. MCCORMICK. We think this is a critical way to help the Bank become more green in its outlook and how it thinks about projects, absolutely.

There will be new infrastructure projects that we would expect this Fund to support. I wouldn't expect a disproportionate amount of that to be coal, but I do think that the Fund may, on occasion, consider projects that are clean coal technology and may, in fact, in some cases, support those.

Again, Mr. Chairman, the argument that I would make to you is that those coal-fired facilities are going to be built in some countries anyway. We want to discourage that, but there may be cases where, if that is going to happen, we want to help finance a project.

The CHAIRMAN. Let me call for this then, and this isn't going to satisfy everybody, but one potential trade-off that could help you would be if the Bank would say, okay, we are going to go ahead with this, but we would be much less likely now to finance existing coal technology, absent some improvement, so that, again, there is an interplay between what is done in the Fund and what is done in the main activity of the Bank.

Mr. MCCORMICK. Mr. Chairman, I couldn't agree more. The point I would make, just knowing this was an issue of concern, just looking back over the last 10 years, in terms of the Bank support for energy infrastructure, only about 10 percent of that has been coal.

Of that 10 percent, roughly 75 percent has been retrofitting versus 25 percent of new infrastructure. I know, for many people, that 25 percent of the 10 percent is still much too much, but I think it would be unfair to represent coal as a major portion of the energy infrastructure today.

I think, in the future, it can become less or probably should become less, and I think the Fund contributes to that.

The CHAIRMAN. Thank you, Mr. Chairman.

Chairman GUTIERREZ. I thank the gentleman.

I now recognize Congresswoman Moore for 5 minutes.

Ms. MOORE OF WISCONSIN. Thank you, Mr. Chairman.

Thank you, sir, for appearing today.

I have questions that really relate to the questions that have already been asked by the subcommittee Chair and our full committee Chair, and perhaps you have answered them by saying that clean coal technology would, in fact, be regarded as part of this—eligible for the Fund.

I suspect that we are going to hear testimony later on today which indicates that it is very inefficient, that there won't be anything brought on board until 2030. Yet other resources are going to be spent for technology that is really not clean. What is the thinking in terms of including that in this Fund?

Mr. MCCORMICK. Congresswoman, there was a real focus on not prejudging what technology would be most appropriate. So, again, I think we agree with Congressman Paul in the sense that we don't think the government should be in the process of developing or advancing technology. It is only supportive—just to be clear—of those technologies that are broadly available and already commercially deployed.

So this is not meant to advance the development of the new technology but rather the deployment of assistant technologies. The trade-off, in terms of collecting, selecting, or willing to consider new projects—again, Congresswoman, I consider this to be a very small percentage of this—was based on the fact that some countries that

are so heavily dependent on coal, to suggest that they wouldn't be deploying coal technology as part of supporting their energy technology just wasn't practical, just wasn't pragmatic.

Ms. MOORE OF WISCONSIN. All right. Thank you.

The World Bank, as has been indicated before, is probably a suspect source of funding this project. What would be wrong with the United Nations framework? I realize that their limited capacity, perhaps, will not start till 2012. But if we could put this in place and perhaps turn the portfolio over to them, there would be a more global systematic deployment of these resources.

The World Bank, as recently as April, did a major fossil fuel lending program, and there may be some conflicts of interest, we think, the huge portfolio that they have with fossil fuel projects and really using some due diligence in administering this program.

So what was your thinking in terms of the World Bank, given their record and their portfolio, doing this lending?

Mr. MCCORMICK. Again, Congresswoman, I think this was just very practical and pragmatic so the UNFCCC is essentially then negotiating—or the Secretary oversees negotiation. It doesn't have the practical organizational capabilities for oversight of implementation, where that has traditionally been a role of the MDB. So we thought the Bank would be in a position to do that.

We also thought sharing many of the things that have been said today about the need for the Bank to become more green, we thought the Clean Technology Fund housed within the Bank would give us greater influence in moving in that direction.

Ms. MOORE OF WISCONSIN. Let me just ask you this, countries, like Sub-Saharan Africa, as our chairman has already indicated, wouldn't initially be part of this concessional funding. But as other countries become more clean, and the World Bank has invested heavily in fossil fuel programs in Sub-Saharan Africa, and we see climate change and floods and other problems, what would happen with the debt that those Sub-Saharan countries have pursuant to fossil fuel creation and then, at some point, some imperative for them to come on board with clean coal technology?

In other words, I am not clear as to how this two-track lending is going to work in the real world.

Mr. MCCORMICK. Congresswoman, we certainly haven't ruled out any country being a participant, any developing country being a participant. I simply said that we expect that the initial focus would be on some of those major economies that account for the most significant portion of greenhouse gas emissions.

So it doesn't rule out the poor of the poorest countries, and we also share your concern, as Chairman Frank has outlined, and that was the reason for the President's increased request on ODA of about 30 percent win this budget.

Ms. MOORE OF WISCONSIN. I know, but they won't be able to afford the exploratory kind of clean technology in Sub-Saharan Africa, but they are going to have the debt on their books at whatever point they join the program. I see my time has expired.

Chairman GUTIERREZ. You can answer the question, if you want.

Ms. MOORE OF WISCONSIN. Yes, thank you.

Mr. MCCORMICK. Congresswoman, they would be eligible. In other words, if they are financing energy infrastructure today, they

would be potentially eligible for asking for support to finance the incremental gap between the clean technology and the dirty technology, so they would be eligible potentially for that program.

Ms. MOORE OF WISCONSIN. That is kind of an underwater loan. They are borrowing today, knowing that it is going to be inadequate. Thank you.

Chairman GUTIERREZ. First of all, let me thank you for coming and testifying before the committee. We look forward to having more conversations as we move forward and try to define just what the moneys will be used for with a little more specificity. Hopefully, you will get to testify before your term has expired. I have a funny feeling this money might not get spent while you are there.

I am not saying that in a negative way. It is just the reality of time, and the Administration is closing—you know, this is going to be 2009 by the time things go. I want to thank you. You have always been so kind and generous with your explanations before the committee and your answers. I want to thank you for your testimony this afternoon.

Mr. MCCORMICK. Thank you, Mr. Chairman.

Chairman GUTIERREZ. Thank you, Mr. Under Secretary.

We have a second panel, and we would like to welcome Mr. Brent Blackwelder, a senior environmental lobbyist and president of Friends of the Earth since 1994.

Mr. Blackwelder founded the Environmental Policy Institute, which merged with Friends of the Earth in 1989, and the American Rivers, the national leading river-saving organization.

Next we have Dr. David Wheeler, senior fellow of the Center for Global Development. As lead economist in the World Bank's development research group from 1993 to 2006, Mr. Wheeler directed environmental policy and research issues in collaboration with policymakers and academics from South America and Southeast Asia.

Third, we have Mr. Jake Werksman, program director of the Institutions and Governance Program at the World Resources Institute. Dr. Werksman served as a lawyer, program director, and managing director at the Foundation for Environmental Law and Development for 10 years.

Finally, we welcome Dr. Andrew Deutz, senior policy advisor of the Nature Conservancy. He currently heads the International Institutions and Agreements Team, which oversees relationships with a variety of multilateral and bilateral agencies.

We welcome you all, and we ask Mr. Blackwelder to proceed.

## STATEMENT OF BRENT BLACKWELDER, PRESIDENT, FRIENDS OF THE EARTH US

Mr. BLACKWELDER. Good afternoon, Mr. Chairman.

I am Brent Blackwelder, president of Friends of the Earth, United States. We are part of Friends of the Earth, International, with member groups in 70 countries. We are the world's largest global environmental advocacy network.

We certainly commend you for holding this hearing on the Clean Technology Fund, and we also appreciate the role that this committee has played over the last 25 years. Going back to June of 1983, when we asked the committee to do the first oversight hearing on the lending of the World Bank—and I testified that June be-

fore this committee—and you proceeded to take my testimony and that given by my colleagues to heart. Many, many things were done to try to improve the lending of the Bank so that it actually didn't create big winners and losers; that it improved environmental quality; that it did not fund projects that spread disease or extinguished the lives of indigenous peoples, or displaced hundreds of thousands of people. We raised all those issues. Some steps have been taken.

What I want to focus on in my testimony here are two questions: One, what is the definition of clean technology; and two, is the World Bank the right entity to be pursuing that?

We are very concerned, in the first, place that coal, even when you try to use the most efficient plants, has a very dirty cycle from start to finish, whether it is the mining process, whether it is burned or the ash, when it is left, how it is disposed of. It is not only in the United States where we are blasting the mountain tops of West Virginia to smithereens and leaving little for the future of the people who would hope to reside there, or whether it is the power plants that we have focused on and testified about that have been financed by the Bank with our tax dollars—in India and China, most recently. One was referred to in earlier testimony. We have brought all those to your attention.

The world is now burgeoning with many, wonderful clean technologies, whether it is getting rid of energy waste through efficient appliances, motors, gears, lights and the like, or whether it is going solar, wind technology and geothermal. There is no shortage.

If the technologies of the past were not subsidized in one way or another, through the Tax Code and through appropriations, these things would be absolutely competitive. The problem has been that there is not a level playing field, and all the externalities of these dirty technologies are shoved off on others.

So, in particular, if you allow a "clean" coal to come in with money going to carbon sequestration, which is decades away from commercial viability, it is another subsidy to coal. And that is not acceptable if we want to go in a new direction that does not have the adverse economic and social environmental consequences of this fossil-fuel lending.

So in summary, we have to exclude coal and be very clear on what constitutes an acceptable recipient here. And furthermore, there are abundant possibilities.

Let me next turn to the World Bank itself as an entity. Having looked at and tried to convince the World Bank, with the bipartisan support of Congress, to shift the energy lending over 25 years into newer technologies that were appropriate and that countries actually wanted, they have actually refused and continue to this day to fund very damaging projects.

And over the years—I will just relate one incident. One of the Bank staffers said, "We have some wonderful energy conservation loans that Tunisia wants, but we can't fund them; it is too small. The Bank doesn't want to do this." And it says, "We can't manage a series of smaller projects." Well, McDonalds manages 28,000 small franchises; they found a managerial model that works.

So I am trying to lay the grounds by saying, what has the World Bank done that would justify any confidence whatsoever that now

it has changed its ways? The lending for fossil fuels hopped big time from Fiscal Year 2005 to Fiscal Year 2006. They are going in the wrong direction. Rather than coming to you and saying, "Oh, we have changed our ways and look at what we are doing, look at the results we are getting, put more into us,"—no, they can't make this claim.

We have no confidence at Friends of the Earth that this money would be spent wisely at the World Bank. There are other mechanisms which we lay out in our testimony that would be suitable.

In summary, we would urge you not to proceed to give the World Bank the authority to do this, but to look at other ways to quickly accelerate the technologies that are available.

[The prepared statement of Mr. Blackwelder can be found on page 33 of the appendix.]

Chairman GUTIERREZ. Thank you.

Dr. Wheeler, please.

**STATEMENT OF DAVID WHEELER, SENIOR FELLOW, CENTER FOR GLOBAL DEVELOPMENT**

Mr. WHEELER. Thank you, Mr. Chairman.

I am here today for the Center for Global Development, which really works on issues that have to do with poverty in the developing world. And so we have an environment component, but it is not our main line as an organization. It is my main line.

I worked in the World Bank for 17 years before coming to the center a year-and-a-half ago. So I thought I would offer you some remarks today to provide you a perspective, at least my perspective, on the World Bank and its candidacy for this Fund and also some conditions that might be useful in trying to steer the World Bank towards responsible governance in this context.

I think I could frame this by trying a couple of retrospective stories on you. Suppose it is 2015. The money has been appropriated for the Clean Technology Fund. The World Bank has been designated as a steward for that Fund. We ask ourselves, what happened with that money?

I think there are two stories we can tell here. At this point, they are equally credible stories, and the outcome will depend largely on the decisions you make.

The first story we might call, "Business As Usual." In that story, the World Bank, guided by the current draft for the Clean Technology Fund, pursues its normal course, which is to try to please everybody and all of its member countries and pass out the money on a number of demonstration projects which make people feel good, pass some of the money out to countries that want to clean up their coal technology a little bit. People feel pretty good about that.

But at the end of 7 or 8 years, having spent billions of dollars, we ask ourselves where did we get for the money? The answer is, not far, because during that entire period, in all of these countries, dirty technology remained cheaper than clean technology.

Without any regulation, the private sector, which is going to propel most of the investment of the power sector, continued right along investing in coal-fired power and fossil-fired power. So this

was a feel-good project, but in the final analysis, I don't think the taxpayers' money was well spent.

Now there is an alternative, and that will really depend on this committee, and that is to insist that this money will be focused where it can do the most good. The only credible argument here for a Clean Technology Fund is to find renewable sources of power whose costs you can drive down to competitiveness with fossil-fired power in fairly short periods of time.

There are technologies out there, as we know. Solar thermal technology is one; wind is another. We are at the cusp here, and we can do this. Now if the money had been spent, as we look back in 2015, on that course, then what we would expect to have seen is the private sector with some subsidies coming into these sectors, coming in to these clean power sources. We would expect them to come down the learning curve, and we could fully expect that some of them would have met cost parity with dirty power by 2015. Then the private sector would take over, and we would have a very hopeful story.

Now those are two equally plausible outcomes. I think the conditions that you put on this arrangement will determine which way we go.

Perhaps I can offer you a few quick thoughts about the Bank, which I think I know pretty well. I have tremendous respect for the Bank. I have many good friends there. And the Bank has done some good work on the environment, and I can provide some details if you are interested.

Fundamentally, it is a powerful organization with a global reach and a lot of experience in big projects. Those are the pros.

What are the cons? Well, as some colleagues have said here, the Bank has a problem with focus. What we need for this Clean Technology Fund is focus, but the Bank has many constituencies. It has many agendas. It has a very hard time focusing and disciplining itself to do one thing well.

Secondly, it is a bureaucracy. It is very natural for people in a bureaucracy to want to perpetuate business as usual. If you read the drafts of the proposals for the Clean Technology Fund, you will see all the voices in that bureaucracy weighing in, in various ways. And the drafts tend to wander around as different constituencies weigh in. It is a very natural thing. It has to be fought.

Now, as my colleagues here have said, the Bank right now doesn't seem well-positioned as a steward for this Fund for two reasons. The first is—as has been said by several—it is still funding big coal-fired power projects. Now there is a rationale for that, but, honestly, it doesn't withstand much scrutiny. It is just business as usual. It has been doing it for a long time.

The second thing is that the Bank is not into carbon accounting. It can't account for the carbon consequences of its own actions. Even though we have U.S. investment banks now doing the carbon accounting, thinking about the projects and valuing the carbon output to those projects, the Bank is not doing it.

So, my conclusion, if you let this thing move forward as an authorization and appropriation without any conditions, what you are going to get is a bunch of feel-good projects that won't amount to

anything in the final analysis that will solve the desperate problem that we face.

But there are three conditions you can impose that will help a lot. The first is a mission focus; the purpose of this Fund should be to make clean power as cheap as dirty power, full stop. If we can't do that, we lose. That means you have to find sources of clean power that are near cost parity now and push those down the learning curve.

And, finally, the World Bank cannot position itself to play well in this sphere if it is not doing carbon accounting. So the third condition I would propose would be, put carbon accounting in place. That is a prerequisite for doing this work. If you can't do it, you don't qualify.

Thank you very much.

[The prepared statement of Mr. Wheeler can be found on page 60 of the appendix.]

Chairman GUTIERREZ. Thank you very much.

Mr. Werksman, please.

**STATEMENT OF JACOB WERKSMAN, PROGRAM DIRECTOR, INSTITUTIONS AND GOVERNANCE PROGRAM, WORLD RESOURCES INSTITUTE**

Mr. WERKSMAN. Thank you, Mr. Chairman, it is an honor to present these observations on the proposal before you.

I am speaking on behalf of the World Resources Institute, an environmental think tank based in Washington but with a network of hundreds of partners throughout the world dedicated to developing practical solutions to the world's most pressing environmental problems.

We make our observations from a point of view of principle rather than prescription, because we understand that this decision is being weighed in the context of several layers of very complex multilateral negotiations, and even a body as powerful as the U.S. Congress can't prescribe outcomes.

Nevertheless, a sizeable appropriation for clean energy could demonstrate that the United States is finally taking the leadership on climate change that the world has been waiting for. If these resources are invested wisely, the benefits will reach underserved communities in developing countries in desperate need of clean sources of energy.

Successful investments could also demonstrate to audiences here in this country that these kinds of investments could, in fact, reshape our own energy sector. If combined with U.S. caps and domestic reductions obligations that support a global deal on climate change, that could help us build the resilience of communities vulnerable to climate change, and this appropriation could, in fact, lead to genuine U.S. leadership on combatting global warming.

But $2 billion, as others has have said, is a small part of the trillions of dollars that are necessary to meet global energy demand. Congress must therefore engage in a process that ensures that these resources are committed to leveraging the greatest possible impact.

Money for new technologies is not enough. In most countries, energy policies focus on short-term costs and supply, and overlook the

longer-term benefits through cost savings, energy security and better environmental performance that can be offered by clean technologies. Only policy innovations can really lead to this long-term change.

These could include things like demand-side management systems, incentives to encourage energy efficiency, feed-in tariffs for renewable energy, and renewable energy portfolio standards. And these policies can really open the door to long-term introduction of renewable energy sources.

Policymaking in the energy sector tends to be closed, and tends to be dominated by interests that have a stake in business-as-usual practices. So if policy reforms are able to take hold in these countries that we care about, they must be developed and implemented through transparent, open, and credible processes. But support for new technologies or policy reforms in developing countries should not be tied to narrow prescriptions or strategies designed to force unregulated reforms.

Approaches based on conditionalities or on coercion could backfire and could undermine U.S. efforts to broker a global deal on climate change.

This is, in other words, Mr. Chairman, a very complex challenge.

We, therefore, believe that any U.S. investment in a CTF administrated by the World Bank needs to leverage transformation in the Bank itself as well as in the developing countries that are the target of these resources.

We have basically three principles that we think should guide these investments:

First, the Clean Technology Fund should leverage investments in transformational technologies of the kinds that David Wheeler just described, policies that fundamentally shift away from carbon-intensive fuels to renewable resources.

Second, we think that this transformation needs to begin with the World Bank's core energy portfolio if the World Bank is, in fact, going to be administering these funds.

Any congressional appropriation for a CTF should promote this transformation and should be seen as an opportunity to actually monitor and verify that the Bank is, in fact, following through on its commitments to be a significant steward of the planet's future with regard to climate change.

Therefore, all of the multilateral development banks that have access to the Clean Technology Fund should rigorously measure and manage their greenhouse gas emissions along the lines that Mr. Wheeler suggested.

Third, we think that the CTF itself, wherever it is housed, needs to operate in accordance with widely accepted principles that are reflected in the U.N. Framework convention and elsewhere.

Donor governments should be prepared to demonstrate, as the co-chairman suggested, that CTF funds are indeed new and additional to development assistance that would otherwise be targeted at poverty alleviation; that the source of the technology used in these investments should not be tied to the nationality of any particular donor; and that the governance of the Fund itself needs to be guided by the principles of transparency, inclusiveness, and accountability by disclosing the information upon which the decisions

are based by including a balanced representation of both donors and recipients and to provide opportunities for a meaningful, civil society participation in its decisions.

We think that the governance, in order to succeed, must be selected on the basis of independence and expertise of the people involved in those decisions, as well as their ability to represent a diversity of interest.

Overall, the United States and other donors involved in the design and implementation of the CTF need to take an approach that is based on genuine partnership that leads to the reform of the banks involved; that creates credible and legitimate governance structures; and that incentivizes the developing countries to take meaningful actions to reduce their emissions while allowing them to promote their sustainable development plans.

And we stand by ready to help the committee with those issues.

[The prepared statement of Mr. Werksman can be found on page 51 of the appendix.]

Chairman GUTIERREZ. Thank you.

**STATEMENT OF DR. ANDREW DEUTZ, DIRECTOR OF INTERNATIONAL INSTITUTIONS, THE NATURE CONSERVANCY**

Mr. DEUTZ. Good afternoon, Mr. Chairman, and members of the subcommittee. I am Dr. Andrew Deutz, Director of International Institutions and Agreements at The Nature Conservancy, a national nonprofit conservation organization representing about a million members in the United States with conservation activities in all 50 States and in 34 countries around the world. I would like to start by thanking you for the opportunity to testify today on the Administration's proposal to establish a multilateral Clean Technology Fund for climate change to be administered by the World Bank. The Clean Technology Fund is part of an emerging package to provide short-term incentives and assistance to developing countries to meet the challenge of climate change mitigation and adaptation and to help them take on new commitments in a future international climate change agreement.

The United States has an opportunity to show strong leadership by contributing to the Clean Technology Fund, as well as provide additional funding for adaptation and reducing emissions from deforestation in developing countries. The World Bank has a comparative advantage to administer these funds in order to disperse large amounts of money to create the right incentives quickly. But the World Bank needs to ensure that it effectively leverages the Clean Technology Fund to both green its own lending portfolio and to green the development trajectory of its client countries. I would like to frame the discussion in terms of how the Clean Technology Fund can help catalyze global action of climate change. The Bali climate convention last December agreed to initiate a new round of global climate change negotiations to develop a new international agreement to reduce emissions by the end of 2009.

One of the significant outcomes of that conference was that developing countries agreed to take on new commitments, but it is contingent on industrialized countries like the United States taking on further emissions reduction commitments and providing the technology and financial incentives to make that happen. In order

to get a global deal by the end of 2009, we will need to construct a suite of incentives to bring developing countries on board. Some of the developing countries, the poorest of the poor, and sub-Saharan Africa and South Asia, will require new and additional resources to help them adapt to climate change. The forest-rich countries in the south, countries like Brazil, Malaysia, and Indonesia can be incentivized through a funding mechanism to reward their efforts to reduce emissions from deforestation. The rapidly industrializing countries, countries like China, India, and South Africa can be incentivized by providing funding to spur uptake of low carbon technologies across a wide range of sectors.

And hopefully, that is what the Clean Technology Fund is there to do. The Nature Conservancy endorses the Administration's request for funds to contribute to the establishment of the Clean Technology Fund administered by the World Bank. We do, however, have a few qualifications: First, the funding must be new and additional to existing U.S. contributions for international climate change and biodiversity aid; second, we would like to see the United States contribute to and be an investor in the World Bank's forest carbon partnership facility to help reduce emissions from deforestation; third, we would also like to see the United States show real international leadership, and also provide similar funding for other critical incentive packages to enable a global deal, namely, funding for adaptation to help the poorest of the poor and for forests.

Lastly, I would like to address the proposal for the World Bank to administer the funding. TNC believes that the World Bank, together with the other regional development banks, are capable of managing the clean development technology, but with caveats. The World Bank does have several comparative advantages, but the ability of the World Bank to manage these should be—the World Bank should be accountable against these comparative advantages. The success of the Clean Technology Fund and the future role of the World Bank in any evolving international climate change financing regime should be contingent on the ability of the World Bank to do two things: First, green its own lending portfolio; and second, help to green the pathway of the developing country clients that the World Bank serves. The World Bank has the ability to influence national development frameworks in developing countries. The World Bank is in dialogue continually with ministries of finance and planning, as well as line ministries, and thus in a position to ensure that clean energy pathways, as well as climate change resiliency and forest conservation are mainstreamed into the core development planning framework of the countries where it works.

Unfortunately the World Bank's track record to date has been fairly poor in mainstreaming environmental concerns into poverty reduction strategies to developing countries. This will be a critical test of the World Bank's credibility going forward if it is to be a good environmental steward.

Finally, the World Bank has the ability to use the Clean Technology Fund as a way to leverage its own much larger transportation and infrastructure lending portfolios. To be a credible part of any future international financial architecture for climate

change, the World Bank will need to clean its own portfolio and demonstrate that it facilitates policy change in its client countries. The Clean Technology Fund should enable it to do this. The key point for the World Bank is that the percentage of low carbon technology in its portfolio has grown from 28 percent to 40 percent over the last few years at a time when the World Bank lending for energy sector has increased from roughly $4 billion to $8 billion.

The good news is that the percentage of lending for clean technology is increasing, but the total amount of money for dirty technology is also increasing. And the World Bank will need to correct that if it is going to be a credible partner in a future international climate change financial architecture in 2012 and beyond. Thank you, Mr. Chairman.

[The prepared statement of Dr. Deutz can be found on page 40 of the appendix.]

Chairman GUTIERREZ. This is the first panel I have had where the minority witnesses and the majority witnesses don't have a great degree—I mean, there are differences, but I can see you are all headed in the same direction. That is unusual in my 16 years here in Congress. We have about 9 minutes, and then we are going to be voting for nearly an hour. So taking that into consideration, I would ask the members to take into consideration that the witnesses would have to wait for us for an hour. I will be back here in an hour, but I am going to try to see if we can't wrap this up. I am just going make two quick—Mr. Blackwelder, we hope to take your testimony and the testimony of your panelists as seriously as it was taken 25 years ago, and hopefully be as good today as you suggest we were 25 years ago.

We understand our responsibility, so I thank you for that comment. And secondly, to Mr. Wheeler, we are going to work on the second outcome that you suggested for this money. We are going to take into consideration all of the witnesses, because I think everybody, as I listened to all four of you, it is the second outcome that you all agree we should work on, and obviously, there is going to be some differences. With that, I would like to hand it over to my ranking member, Dr. Paul.

Dr. PAUL. Thank you Mr. Chairman. I only have a brief comment, and maybe one question. I was pleased to hear Mr. Blackwelder mention his reservations about the World Bank being the best vehicle for doing this, and I certainly agree with that. I also want to raise the question about the potential use of these funds for development of better technologies. Once again, I am always concerned about economic decisions being made and directed. It is sort of like politicians deciding, well, the very best way to have ethanol is to subsidize farmers and prohibit people from raising hemp, and hemp is so much better. We make these foolish things and we get off track. And in another area, I think we have done the same thing, and that has to do with nuclear power.

We put up big road blocks to nuclear power. Everything I read, the evidence is pretty clear; it is clean, it is safe, it is efficient, but we don't even talk about it. It seems to me even in this country, which would apply to every country, if we had nuclear power and cheap electricity, maybe we would have a lot of electric cars running around the country today. Why is it that we hear no mention

of nuclear power when the evidence is so overwhelmingly in favor of this being a very efficient and clean and cheap fuel? Does anybody care to make a comment?

Mr. BLACKWELDER. I would be glad to speak to that because Friends of the Earth has been working on that issue now for almost 40 years. The problem is even if you had no radioactive waste disposal issues, even if there was no proliferation of bomb making material, even if terrorists weren't targeting nuclear power plants, which they have on their menu, and you said with none of those problems, nuclear power plants can't be built fast enough to do the job. If you had $20 billion to spend, you could go 4 to 10 times further in terms of greenhouse reductions by putting it into cost-effective on-the-shelf technology available today. So why financially, economically would you want to go the nuclear route?

Dr. PAUL. Well, because after so much time, you can look back and say, why didn't we open up the door to allow it to develop? But we haven't done anything in 20 years. So if we do nothing but encourage the world and ourselves to stay away from it, 20 or 30 or 40 years, you will just say, well, it takes too long, we have to keep doing these things, then you get the pressure from the coal people. And they will say, we will clean up the technology, we will clean up the coal, we can be totally energy independent.

Their arguments are powerful, and you have to come back and say, well, it really isn't all that clean. I am just saying that overall when we talk about energy, I think we are just harming ourselves. Even though these potential dangers exist, they all exist for mining coal. And oil and everything else has potential danger. But just think of the record. Think, we have had 50 years of nuclear submarines, men sleeping beside a nuclear reactor, and still no cancer in the people who have been on nuclear submarines. To me, it is rather miraculous, and all we seem to do is get in the way of it. So I am just throwing that out as a suggestion. I understand the time involved, it is true. But some day we have to plan for the future rather than planning for the next year or two. And I have no further follow-up.

Chairman GUTIERREZ. Thank you, Dr. Paul. We have about 4 minutes before the vote is over.

The CHAIRMAN. I just want to say to the panel that I appreciate it. As you may have gotten from my questions, I read some of your testimony. My sense is that the Administration cares strongly about—something that is likely to happen. I think we will be glad to work with you on the conditions, including maybe a 1-year timetable. Beyond that, I don't want to get into the substance on the question of men's sleeping habits; that is one that I have tried to stay away from in public, so I won't comment further.

Chairman GUTIERREZ. Thank you Mr. Chairman. Congresswoman Moore, do you want to make a comment before we close off?

Ms. MOORE OF WISCONSIN. Thank you. I appreciate all of your testimony. I was particularly taken by how thoughtful you all were. I think it was Dr. Deutz who talked about this being a three-part kind of process considering all the different economic statuses of all the countries, and saying that we would have to give a lot more foreign aid to more developing countries in order to keep pace with

this technology. Thank you. And I will be thoroughly reviewing your testimony.

Chairman GUTIERREZ. Let me thank the witnesses and the members for their participation in this hearing. The Chair notes that some members may have additional questions for the witnesses which they may wish to submit in writing. Therefore, without objection, the hearing record will remain open for 30 days for members to submit written questions to the witnesses and to place their responses in the record. The subcommittee is now adjourned.

Mr. BLACKWELDER. Mr. Chairman, may I submit a 2-page statement signed by over 100 international organizations, a global civil society statement for the record?

Chairman GUTIERREZ. Without objection, it is so ordered.

Mr. BLACKWELDER. I would also like to furnish the committee with two copies of "Carbon-Free Nuclear-Free by 2050" to show that it can be done.

Chairman GUTIERREZ. Thank you so much, gentlemen, for your testimony.

[Whereupon, at 2:45 p.m., the hearing was adjourned.]

# A P P E N D I X

June 5, 2008

**Chairman Luis V. Gutierrez' Statement**

**DIMP Subcommittee Hearing Entitled: "Examining the Administration's Proposal to Establish a Multilateral Clean Technology Fund"**

**June 5, 2008**

Climate change is one of the greatest and most pressing environmental challenges that the world faces today. Scientific analysis tells us that climate change is an imminent and unprecedented threat both to our natural systems and to the hundreds of millions of people who depend upon those systems for their livelihoods, health and survival.

As with any challenge this large, U.S. leadership is essential to catalyze successful global efforts. Furthermore, a strong U.S. climate policy would open important channels for international cooperation, which in turn will provide incentives and pathways for developing countries to participate in reducing greenhouse gas emissions, create important opportunities for U.S. companies to export U.S. clean technologies, and help maximize efficiencies and thus control the costs of climate mitigation.

The greatest challenge the world will face with respect to Climate change over the next

five-to-ten years is reducing greenhouse gas emissions in major developing economies, such as China, India and Brazil. Because this is such a difficult task, I believe a multilateral approach is the best approach and applaud the Administration for putting its proposal forward to create a Clean Technology Fund ("CTF") to be administered by the World Bank.

That being said, I have several concerns with the Administration's proposal. First, and really a threshold issue for the establishment of the CTF is how it will define eligible "clean" technologies and projects.

Undoubtedly, the CTF will be under pressure from recipient countries to use a broad definition that would include funding for oil, gas, and coal projects in an effort to make these projects less "dirty." In fact, World Bank documents prepared in support of the CTF's creation indicate that coal-related projects would be eligible for funding.

Environmental groups argue, and I believe rightly so, that eligibility should be based on a stricter definition of "clean." In other words, given the scarcity of public dollars devoted to reducing greenhouse gases, the better use of

these funds would not be to make heavily polluting activities marginally less dirty, but to stimulate wider use of truly clean technologies and activities. Before Congress moves forward to authorize and appropriate funding for the CTF, I believe we should consider restrictions on the definition of "clean technology."

Second, Treasury officials have indicated that the CTF will focus its resources on countries that are the biggest source of greenhouse gas emissions in the developing world. This most likely means rapidly growing countries like China, India, and Brazil. It is my

understanding that both government and private sector entities will be eligible for funding under the CTF. Given that the financing will be concessional (grants or below market rate financing), extending a public subsidy to private entities raises a different set of issues than does providing aid to governments and non-profits.

How will the CTF ensure that its aid is generating new clean technology investment and is not simply subsidizing private firms for activities they would engage in anyway? How will the CTF determine viable firms and projects? Will the CTF favor large firms over

small firms? Bottom line, I do not believe we should be creating a fund that subsidizes an expanding use of coal for power generation in China and India.

Finally, at a time when countries like China are rapidly accumulating currency reserves and investing them globally, introducing a new source of grants and concessional lending specifically aimed at these countries may be a questionable use of scarce aid dollars. Treasury officials indicate that country eligibility will be tied to broader commitments made by these countries to pursue a national low carbon

strategy, so the impact of the CTF will potentially be larger than simply subsidizing individual projects, but I would like to have better guidance on this issue before we move forward.

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Financial Services Domestic and International Policy, Trade and Technology Subcommittee
Hearing "Examining the Administration's Proposal to Establish a Multilateral Clean Technology Fund"
Opening Statement for Congressman André Carson
June 5, 2008

Thank you, Chairman Gutierrez and Ranking Member Paul for holding this hearing today to discuss the Administration's proposal for a Multilateral Clean Technology Fund.

The Intergovernmental Panel on Global Climate Change notes that at the current rate of carbon and greenhouse gas emissions, we can expect worsening heat waves and droughts, increasingly common extreme weather events, and the near disappearance of the Arctic Ocean by the end of this century. Further, the global temperature is predicted to rise 4.5 to 6.3 degrees Fahrenheit by the year 2100.

It is imperative that we take action now to stabilize our climate for future generations. I commend the Administration for recognizing this grave problem and look forward to debating the merits of its proposal for a Multilateral Clean Technology Fund today.

The Clean Technology Fund seeks to direct resources to developing countries who are significant contributors of gas emissions. Clearly, pollution from developing countries remains a significant challenge to combating global warming. Given that international climate resources are severely limited, however, we must make sure that this plan would truly provide the kinds of sweeping changes to the infrastructure in those countries needed help bring about stabilization to the global climate. There have been concerns raised as to whether or not the proposed fund in its current form would accomplish that.

Some question the wisdom behind placing this fund under the governance of the World Bank, given its history of concentrating its energy investment in traditional carbon projects. Others claim that it is the appropriate institution for the project since it has the ability to generate the necessary funding quickly and can work to reverse current climate trends much faster than other institutions.

This plan would require a significant investment of taxpayers' money. We must ensure these concerns are addressed and that any investment of this kind yields the most dramatic and change to help our climate as possible. I thank the witnesses for participating today and I look forward to this discussion.

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**Testimony Brent Blackwelder, President, Friends of the Earth US before the House Committee on Financial Services Hearing Examining the Administration's Proposal to Establish a Multilateral Clean Technology Fund, June 5, 2008**

**Introduction**

Friends of the Earth-US appreciates the opportunity to testify before the House Financial Services Committee concerning the Administration's proposal to establish a multilateral clean technology fund. Friends of the Earth-US is the U.S. voice of the world's largest environmental advocacy network, Friends of the Earth International, uniting 69 national member groups and some 5,000 local groups on every continent. We work to protect the rights of all people to live in a safe and healthy environment, both at home and around the world.

Our goals are to protect the health of the planet and to promote a socially just world. For 25 years, Friends of the Earth has campaigned to hold powerful institutions involved in international development accountable to higher standards of environmental quality, social justice, and democratic governance. In 1983, Friends of the Earth helped launch a successful movement that spurred the creation of the first environmental and social standards at the World Bank Group and other international financial institutions.

Fighting global warming in a just and equitable manner is at the heart of Friends of the Earth's work. Climate destabilization affects everyone, but the world's poorest people will bear the brunt of its impacts, even though the United States and other industrialized countries are largely responsible for the greenhouse gas pollution that causes climate change. Responses to climate change must be aggressive and immediate, just and equitable, and must take into consideration the disproportionate role that the United States has played in creating global warming.

Virtually the entire environmental community, including Friends of the Earth, believes that clean technology transfer is a critical component of solving global warming and an important part of any global deal to address the climate crisis. We applaud Congress's recognition of the role that the U.S. can and must play in facilitating technology transfer to those countries most in need of a clean energy transformation.

We come before this Committee with two fundamental concerns about the World Bank's involvement in the Clean Technology Fund (CTF) proposal that has been put forward by the Administration. Our first concern is that the Bank does not define what it means by "clean", leaving the door open for dirty technologies to be among those transferred. Our second concern is that the World Bank,

because of its mandate and track record, is not the right institution to control the CTF.

**Part I**

Our first concern is the lack of definition of clean technology. We believe that Congress must ensure that clean technology funding is indeed used for truly clean technology. Clear definitions of what does – and what does not – constitute clean technology are obvious pre-requisites to ensure that funds are used to transfer technologies that do not perpetuate the problem of rising greenhouse gas emissions. Clean technology funds should catalyze a rapid transition to renewable energy by subsidizing the cost gap between high greenhouse gas emitting technologies and clean technologies, such as solar thermal.

Top peer-reviewed scientists are telling the public that we must reduce carbon emissions quickly over the next decade in order to avoid serious destabilization of the earth's climate. This means clean technology funding must be transformational; that is, such funding should accelerate the shift into new energy and transportation systems, rather than taking the "band-aid approach" of making individual projects marginally or incrementally less dirty.

According to the World Bank's Proposal for a Clean Technology Fund, "the CTF will seek to demonstrate how financial and other incentives can be scaled-up to accelerate deployment, diffusion and transfer of low-carbon technologies." Funded "actions" are to be "transformational." However, neither "clean" nor "transformational" nor "low-carbon" is defined. What is clear is that limited public resources, including US taxpayer money, could potentially be used to fund massive energy projects that are only somewhat less polluting than the dirtiest existing projects.

Although the World Bank pays rhetorical tribute to a transformational shift toward a low-carbon economy, it has not exhibited a commitment through its actual energy lending over the past 25 years. It had to be pressured into its current commitment to increase renewable energy and energy efficiency lending by 20 percent each year for 5 years – a commitment from which the private sector arms of the World Bank Group are exempt. And while talking about increasing renewable energy, the Bank is moving quickly to finance and help lock in high carbon energy paths in the fastest growing economies.

For example, the World Bank has already indicated that supercritical coal plants could be a part of the CTF. These plants will be clean only in comparison to the older generation of subcritical coal plants, but they will not substantially mitigate the climate problem. Furthermore, from the very mining of the coal to the disposal of the ash at the end of combustion, the coal cycle creates serious pollution and health problems. Using public monies to subsidize coal plants in

places like India and China will actually significantly increase the total load of carbon emissions to the atmosphere.

The World Bank has also indicated that it could use CTF funds for "Carbon Capture and Storage (CCS)-readiness." One week ago, the *New York Times* reported that the push for clean coal in the United States is slowing due to high costs, and that the industry does not expect to have CCS in place for decades, far too late to be a major solution to global warming. Under the Bank's current proposal, therefore, clean technology funds will very likely be used to finance a technology in poorer countries that is not advancing very fast even in the richest country in the world.

It is highly wasteful to allow the use of scarce climate funding to underwrite technologies like CCS that have not been proven to work or will not come on line in the near future. In the case of CCS, the best-case scenario as outlined by the World Business Council for Sustainable Development is that the technology would be ready by 2030.[1] Such a counter-productive plan would lock in high emission coal plants in the hope of future mitigation that may never be achieved, or may be achieved only after catastrophic climate change has already occurred.

CCS is transfer of techno-fantasy, not clean technology transfer, and could be plagued with verification and enforcement problems. Using public money for coal and CCS may boost companies that make coal plant equipment, but it cannot be considered part of the solution for the climate crisis.

At its most fundamental level, clean technology must actually be clean. Clean energy technologies must have the potential for large-scale use without causing dangerous climate change or must achieve significant emissions reductions – on the order of 80% plus by 2050 – compared to currently employed technologies, while avoiding additional significant adverse impacts. Clean energy technologies should not include oil, gas for export, any type of coal technology, hydropower above ten megawatts, or nuclear power. Moreover, there should be a certification requirement to ensure that none of the funds have been used for coal, oil, gas or nuclear projects, with penalties and decertification imposed in the event that certifiers misinform fund auditors

Clean end-use technologies should not include HFC-23 abatement projects, whereby funds to support destruction of this by-product of HCFC-22 manufacturing creates a perverse incentive to increase production of the original ozone-depleting refrigerant. A study by Stanford researchers released in 2007 showed that finance for emissions reduction for thorough HFC-23 destruction generated twice the income of the refrigerant gases themselves, generating profits for plant owners and the motivation and capital to invest in more HCFC-22 production.

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[1] World Business Council for Sustainable Development, 2006; see also Rochon, Emily. "False Hope: Why carbon capture and storage won't save the climate." Greenpeace, the Netherlands; May 2008, p. 6.

Technologies eligible for support under a US funded Clean Technology Fund should include the full range of existing solar, wind, hydropower below ten megawatts, and geothermal energy supply technologies. Clean technology could include biomass technologies, but only in cases where they reduce greenhouse gas emissions by 80% on a full life cycle basis - including direct and indirect land use change; do not degrade or imperil water supply or quantity; do not degrade soil quality or quantity; and do not threaten biodiverse areas. Clean end-use technologies include end-use energy efficiency measures that achieve substantial reductions in greenhouse gas emissions.

The rapid expansion of Colombia's palm oil production is creating both environmental harm and human rights abuse. Already, the land area devoted to oil palm plantations in Colombia has nearly doubled from 145,027 hectares in 1998 to 275,317 hectares in 2005, causing large-scale deforestation and an increase in global warming pollution. Reports of forced and sometimes violent displacement linked to the expansion of palm oil plantations suggest serious human rights violations and illegal land acquisition.

A US CTF must include, and be guided by, publicly disclosed, full life cycle carbon and greenhouse gas accounting, including comparison of alternatives.

Within the parameters of prioritizing clean, no-carbon and low-carbon transformational technologies, a US CTF should give preference to small, locally controlled and managed projects that provide local energy access, improve living standards, and directly benefit low-income groups. Clean, transformational energy should put livelihood needs ahead of export-oriented projects. US clean technology funds should give preference to grants that provide incentives for developing countries to embrace a clean development path and should be explicitly additional to the Overseas Development Assistance commitment of 0.7% GDP.

**Part II**

Friends of the Earth's second over-riding concern about the Clean Technology Fund pertains to its potentially multilateral nature. A multilateral Clean Technology Fund should be governed and managed by the UN Framework Convention on Climate Change (UNFCCC), to which the US is a party, not the World Bank. We cannot overemphasize that the World Bank is the wrong institution to control any clean technology fund.

Key to the role of technology transfer within the context of any international climate regime is the obligation of industrialized countries within the UNFCCC to provide measurable, reportable and verifiable support to developing countries to reduce emissions. Under the World Bank's current proposal, these funds are treated as conventional development assistance, thereby undermining developed

country commitments to international aid. These funds must be additional, and must not be considered development assistance.

As an institution that by definition manages development assistance, not climate change, the World Bank is the wrong home for a CTF.

In addition, the World Bank has a terrible track record when it comes to climate change. Before the World Bank controls any climate funding, its own energy lending patterns must be addressed. The World Bank Group continues to commit scarce international development finance in a manner that locks in long-term fossil fuel use and is inconsistent with international climate needs. The Bank is first and foremost the world's largest multilateral lender for fossil fuel projects and has an enormous carbon footprint for which it is not held to account.

Just as it was announcing its proposed CTF, the World Bank showed its true colors, providing a clear warning as to why the US Congress should not give any money to a Bank-controlled CTF. In April 2008, the Bank approved a $450 million loan to Tata Power Company Limited - part of India's giant multinational corporation, the Tata Group - for a massive 4,000 megawatt coal project in Gujarat, India, near an area with huge solar thermal power potential. Tata Power earned $1.6 billion in revenue in 2007. The coal project is expected to emit 23 million tons of carbon dioxide per year and will be one of the 50 largest greenhouse gas emitters in the world. The World Bank division justified this loan on the basis that Tata's coal plant would be better "than the average plants in India."

A much better use of public money would be to subsidize proven clean energy technologies, such as solar thermal, so as to make them cheaper than coal.

The World Bank currently spends some $1 billion per year, and growing, on oil and gas industries, contributing substantially to global warming. In 2006, oil, gas, and power commitments accounted for 77% of the World Bank's total energy program. Only about 6 percent went to "new renewables," such as wind, solar, and mini-hydro.

In fact, since the Gleneagles G8 meeting in 2005, where the Bank Group was tasked with designing a clean energy investment framework, lending for fossil fuels has actually increased at a rate that exceeds the increase in renewable technologies – thus exacerbating an already large disparity in funding.[2] World Bank Group support for fossil fuel extraction in FY06 actually increased 93% compared to FY05. The private sector lending arm of the World Bank Group – the International Finance Corporation (IFC) – increased its support for oil alone by more than 75% from FY 05-06.

[2] Current World Bank Group support for fossil fuels, including power, has increased at least 42% over FY05 levels. World Bank support for renewables and efficiency is also increasing but by less than its support for fossil fuels – 28-40% by the Bank's own estimates. So the gap in funding is actually growing larger, and exactly the wrong signals are being sent to the market.

Due to this and other inherent conflicts of interests, the World Bank, as an institution, is burdened by fundamental issues of trust with the very constituencies that it professes to serve. Therefore, any initiative administered by the Bank will at best have to work very hard to overcome legitimate skepticism, and at worst will be undermined and rendered ineffective by the reputation of its parent.

Developing countries have already voiced grave concerns about a World Bank-controlled CTF. At the April international climate change negotiations in Bangkok, Thailand, the G77 and China criticized the World Bank's Climate Investment Funds, including the CTF. The Bank's proposed climate funds have been designed without guidance from parties to the UNFCCC; lack transparency; potentially undermine UNFCCC efforts and commitments and divert funds away from the UNFCCC.

Furthermore, World Bank management is offering minimal public comment period, in English only, on an issue of obvious global significance. This kind of disregard for the importance of the input from global civil society is unfortunately typical of the World Bank and illustrative of our concerns regarding the Bank's administration of climate funds.

With a record as the world's largest multilateral lender for fossil fuel projects; an enormous carbon footprint for which it is not held to account; a poor environmental and human rights track record; and a serious lack of democratic governance and traditions, the World Bank is absolutely the wrong institution to be in charge of any clean technology fund. Congress should not allow the World Bank to control a US Clean Technology Fund.

**Conclusion**

In conclusion, Friends of the Earth recommends that the US Congress authorize funds that go exclusively to technologies that, even if implemented on a large scale, will truly be compatible with fighting climate change. We also recommend that US clean technology funding not be contributed to the World Bank's proposed Clean Technology Fund. Rather, it is the World Bank that needs to transform its entire existing energy portfolio to be part of the solution, not a major contributor to the problem.

Until a clean technology funding mechanism is established under the UN Framework Convention on Climate Change, US clean technology funding should be directed bilaterally, with the understanding that these funds fall outside the rubric of conventional development aid. Meanwhile, the U.S. should participate fully and constructively in ongoing discussions within UNFCCC auspices to set up a global Clean Technology Fund.

The Multilateral Fund for the Implementation of the Montreal Protocol is an example of a successful multilateral environment fund governed and operated entirely outside the World Bank's management. The Fund's fundamental principle of "common but differentiated responsibility," with developed and developing country parity in governance structures and the assurance of sustained funding, has led to widespread adoption and implementation of the Montreal Protocol among developing countries. Confidence in the Montreal Protocol Fund led to the decision in 2007 by parties to the Montreal Protocol to adopt even tighter timelines for phasing out ozone-depleting substances. The Global Fund to Fight AIDS, Tuberculosis and Malaria offers another case in point. In addition, Mexico has put forward a proposal for a Multinational Fund for Climate Change, which includes a low carbon technology facility. The critical point is this: to make an urgently needed commitment to funding transformational clean technology, we do not need the World Bank.

Legislation authorizing funds for a US Clean Technology Fund should also include explicit language prioritizing respect for universally recognized human rights, including those of indigenous peoples.

Friends of the Earth recommends to the House Financial Services Committee and other relevant committees that the annual authorizations and appropriations for a US CTF be informed by a detailed emissions reductions report, annual review, and independent evaluation. Assessment, evaluations and reporting should cover, but not be limited to, the following: greenhouse gas emissions and reductions attributable to each project; the extent to which a US CTF is meeting its greenhouse gas reduction goals; local and national access to electricity, including increased access to energy for low income groups and percentage of energy for export; changes in land tenure at project sites; environmental impact assessment; human rights impact assessment; and a listing of each new project supported by the CTF that involves renewable energy and environmentally beneficial products and services, including clean energy technology.

**Testimony of Dr. Andrew Deutz**
**Director, International Institutions and Agreements**
**The Nature Conservancy**
**Before the House Committee on Financial Services**
**Subcommittee on Domestic and International Monetary Policy, Trade, and Technology**

**June 5, 2008, 1:30pm**

**Summary**


- Climate change is the greatest environmental challenge that our society faces today. Analysis by our scientists tells us that climate change is an imminent and unprecedented threat both to natural systems and to the hundreds of millions of people who depend upon those systems for their livelihoods, health and welfare.

- U.S. leadership is essential to catalyze successful global efforts. A strong U.S. climate policy would open significant channels for international cooperation that can provide incentives and pathways for developing countries to participate in reducing greenhouse gas emissions, create important opportunities for U.S. companies to engage in international carbon markets and to export U.S. clean technologies, and help maximize efficiencies and thus control the costs of climate mitigation

- We support the Clean Technology Fund funding. By contributing to the Clean Technology Fund, the US will support one of the key enabling mechanisms to encourage developing countries to pursue a cleaner, more sustainable path to development – one that will benefit all of us by helping to reduce the greenhouse gas emissions these countries will produce, and helping to reduce their growing demand for increasingly scarce sources of energy. This would be a demonstration of much valued, and needed, US leadership to address climate change in the international climate debate. And by coming to the international bargaining table with carrots, in the form of technology funding, the US will be in a much stronger negotiating position.

- The CTF will provide short term incentives to help developing countries meet the challenges of climate change mitigation and adaptation and to help them take on new commitments in a future international climate change agreement.

- TNC believes that the World Bank, together with the other regional development banks, is capable of managing the Clean Technology Fund. The World Bank has several comparative advantages which make this so – against which the World Bank should be held accountable and against which the success of the Clean Technology Fund and the future role of the World Bank in international climate change financing should be evaluated.

**FULL TESTIMONY**

Good afternoon Mr. Chairman and members of the Subcommittee. I am Dr. Andrew Deutz, Director of International Institutions and Agreements at The Nature Conservancy. I would like to start by thanking you for the opportunity to testify today on the Administration's proposal to establish a multilateral Clean Technology Fund for climate change to be administered by the World Bank.

The Clean Technology Fund is part of an emerging package to provide short term incentives and assistance to help developing countries meet the challenges of climate change mitigation and adaptation and to help them take on new commitments in a future international climate change agreement. The United States has an opportunity to show strong leadership by contributing to the Clean Technology Fund, as well as provide additional funding for adaptation and reducing emissions from deforestation in developing countries. The World Bank has a comparative advantage in administer these funds, but it needs to ensure that it effectively leverages the Clean Technology Fund to green the development trajectory of its client countries and its own larger lending portfolio.

My comments today will begin with some background on The Nature Conservancy's interest and involvement in climate change and then focus on three key themes – the international climate change policy context, why the U.S. should participate in the Clean Technology Fund, and the role of the World Bank.

**The Nature Conservancy and Climate Change**

The Nature Conservancy is an international, nonprofit organization dedicated to the conservation of biological diversity. Our mission is to preserve the plants, animals and natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. Our on-the-ground conservation work is carried out in all 50 states and in more than 30 countries and is supported by approximately one million individual members. The Nature Conservancy has protected more than 117 million acres of land and 5,000 miles of river and more than 100 marine areas around the world.

Climate change is the greatest environmental challenge that our society faces today. Every acre of land and mile of coast protected by The Nature Conservancy will be affected by climate change. Climate change is already stressing human and natural systems in ways that menace economies, people and biodiversity. Prompt action to address this threat is essential to minimize future harm to nature and to the social and economic fabric of our communities.

**A Comprehensive U.S. Climate Policy**

While the testimony provided today focuses on U.S. support for the Clean Technology Fund, strong action to address all major causes of climate change across sectors is essential. The Nature Conservancy urges Congress to act quickly to address this

mounting challenge. We advocate multi-sector climate change policies that include three paramount concepts:

- A strong cost-effective cap on emissions and a market-based program designed to stabilize atmospheric greenhouse gas concentrations at a level that ensures the well-being of human communities and ecosystems worldwide.
- Incorporation of verified credits from reduction of emissions from forest and land-use practices.
- Support for programs and activities designed to help ecosystems and people that rely on them to cope with the impacts of climate change.

U.S. leadership is essential to catalyze successful global efforts to adopt comprehensive climate policy that includes the above concepts. A strong U.S. climate policy would open significant channels for international cooperation that can:

- Provide incentives and pathways for developing countries to participate in reducing greenhouse gas emissions;
- Create important opportunities for U.S. companies to engage in international carbon markets and to export U.S. clean technologies; and
- Help maximize efficiencies and thus control the costs of climate mitigation.

**The International Climate Change Policy Context**

I would like to frame the discussion about the Clean Technology Fund in terms of catalyzing global action on climate change. The Bali Climate Change Conference last December agreed to initiate a new round of global climate change negotiations to develop a new international agreement on emissions reductions by the end of 2009. The new agreement will address four key "building blocks" – mitigation measures, adaptation measures, technology, and finance. One of the breakthroughs of the Bali talks was the willingness of developing countries, including the major emitting developing countries like China, India, Brazil and South Africa, to move beyond the commitments they made in adopting the UN Climate Change Convention in 1992 to take on new commitments to alter the carbon intensity of their development pathways. This willingness was contingent on the industrialized countries, like the United States, showing leadership by taking on further emissions reductions commitments and by providing financial and technology support to developing countries to assist their efforts to mitigate and adapt to climate change.

Getting a global deal by the end of 2009 will require constructing a suite of incentives for developing countries to undertake new commitments. The incentive package will likely have three components: first, least developed countries – mainly in sub-Saharan Africa, South Asia, and small islands - which are likely to suffer some of the worst impacts of climate change yet be least able to deal with them effectively, will need to be provided with increased foreign aid flows to help them adapt. Second, the forest-rich tropical countries – countries like Brazil, Indonesia, Papua New Guinea, and some Latin American and central Africa countries – will be incentivized by new funding vehicles to reward them for reducing their emissions from deforestation. Third, the rapidly industrializing countries with heavy industrial sectors – countries like China, India and

South Africa – can be incentivized by providing funding to spur the uptake of low-carbon technologies across a wide range of sectors – electricity generation, transportation, manufacturing, etc.

Getting this tripartite incentive structure in place – for adaptation, for forests, and for technology – is critical to getting developing countries to take on new commitments as part of a global deal in 2009. These developing country commitments will not be the same type of quantified reduction targets that industrialized countries will need to take on. Nevertheless, getting developing countries to take on new commitments will be the enabling condition for industrialized countries, including the U.S., to sign on.

So, when the U.S. contributes to the Clean Technology Fund, it signals critical support for one of the key enabling factors for a global climate deal. Coming to the table with carrots instead of sticks further demonstrates the much valued and needed U.S. leadership in the international climate debate.

**U.S. Participation in the Clean Technology Fund**

The Nature Conservancy strongly endorses the Administration's request for funds to contribute to the establishment of the Clean Technology Fund administered by the World Bank. We do, however, have a few qualifications.

First, the funding must be new and additional to existing U.S. contributions for international climate change and biodiversity aid. We would like to ensure that the U.S. contribution to the Global Environment Facility (GEF), the multilateral fund established to finance climate change and biodiversity projects in the developing world, is fully assured. Current U.S. commitments to the GEF stand at $80 million per year, and we encourage the U.S. to significantly expand that support when the GEF Trust Fund is replenished next year. We also encourage the U.S. to pay its outstanding arrears to the GEF, currently about $150 million, noting that this will mobilize further, withheld contributions by other donor governments. In addition, we would like to ensure that the international conservation funding that goes through USAID, currently $195 million per year, is assured and expanded over time.

Second, we would also like to see the United States become an investor in the Forest Carbon Partnership Facility (FCPF). Deforestation currently accounts for about 20% of global greenhouse gas emissions; Indonesia and Brazil are the third and fourth largest greenhouse gas emitters, behind the United States and China, and the majority of their emissions come from deforestation and land conversion. The FCPF was established last December to bring together donors and partners to fund pilot projects to reduce emissions from deforestation in order to help shape a global mechanism to reduce emissions in developing countries, conserve biodiversity, promote local livelihoods in tropical countries, and provide real climate change benefits. It will serve as a platform for key countries to come together and work out the rules and best practices for reducing deforestation. It will be important that the United States have a seat at the table in designing one of the critical elements of the future climate change regime, as well to as

be able to bring to bear the extensive expertise that exists in the U.S., e.g, in the U.S. Forest Service, academia, and private forest managers. The FCPF currently has pledges for capitalization at $165 million out of an envisioned $300 million. Investors include ten governments (including the U.K, Japan, Germany and Australia) as well as The Nature Conservancy. The Nature Conservancy is investing five million dollars. The Administration, we understand, has also requested a modest $5 million in FY09. We are glad to see the Administration working to be part of the FCPF, and would like to see this request be significantly expanded.

Third, we would like to see the United States show real international leadership and also provide similar amounts of funding for the other critical incentive packages to enable a global deal – namely, funding for adaptation and for forests. We note that there are provisions within the Lieberman-Warner bill under consideration in the Senate, but those potential funding streams would only come on line after 2012. We would like to see the United States provide increased international assistance for adaptation and forests now, in order to provide carrots for the negotiations this year and next and to bridge the gap in international funding until 2012. The World Bank is also establishing a Strategic Climate Fund with a pilot program for climate resilience (aka adaptation) as well as a possible Forest Investment Fund.

By way of comparison, we note that the UK is considering about a $2 billion contribution to the World Bank's Climate Investment Fund and that Japan is considering a billion, and possibly more over the next few years. Last December, Norway's Prime Minister, Jens Stoltenberg, announced $2.5 billion in funding for forests over the next five years. Last week, German Chancellor Angela Merkel announced that Germany would contribute 500 million Euros for forest protection and biodiversity conservation over the next four years, increasing to 500 million Euros per year after 2012.

By way of comparison, we note that the UK is considering approximately a $2 billion contribution to the World Bank's Climate Investment Fund and that Japan is considering $1 billion, and possibly more over the next few years. Last December, Norway's Prime Minister, Jens Stoltenberg, announced $2.5 billion in funding for forests over the next five years. Last week, German Chancellor Angela Merkel announced that Germany would contribute 500 million Euros (approx. $750 million) for forest protection and biodiversity conservation over the next four years, increasing to 500 million Euros per year after 2012.

For the U.S. to provide $2 billion in total funding towards the Clean Technology Fund would be a welcome signal of U.S. re-engagement in the international climate change discussions. It would help to incentivize developing countries to take on new commitments in the forthcoming global climate change negotiations, and that is an enabling condition for the U.S. to shoulder its global responsibility. For the U.S. to come to the negotiating table with a new set of carrots will be a show of long-awaited U.S. leadership.

In addition, the Clean Technology Fund will be targeted towards the rapidly industrializing, rapidly growing developing countries like China and India. These are huge growth markets for clean technologies, which are likely to be one of the great growth sectors of the 21st century's globalized, carbon-constrained economy. Generating market opportunities for next generation technology penetration in countries like China and India is a smart investment – one that countries like Japan and the UK are planning to make.

**The Role of the World Bank**

Lastly, I would like to address the proposal for the World Bank to administer this funding. TNC believes that the World Bank, together with the other regional development banks, is the right institution to manage the Clean Technology Fund. The World Bank has several comparative advantages which make this so – against which the World Bank should be held accountable and against which the success of the Clean Technology Fund and the future role of the World Bank in international climate change financing should be evaluated.

First, the World Bank, together with the other regional development banks, has the capacity to disburse large amounts of money quickly and relatively efficiently. Timing is critical here. The purpose of the Clean Technology Fund is to generate projects at a scale significant enough to impact a countries emissions trajectory and be replicable. In terms of the negotiations, the funds should be available to serve as incentives for reaching an agreement by 2009. In terms of project execution, the projects should be demonstrating tangible results by 2012, when the next generation of climate change financing vehicle – both public and private – should come on line. These projects need to demonstrate measureable success by then in order to provide models beginning in 2012 – that is the only way to achieve changes in developing country emissions at a scale that matters.

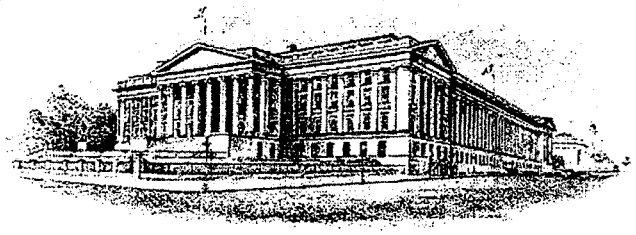
Second, the World Bank has the ability to offer large grants, concessional financing and blended financing vehicles. There are other climate change financing vehicles, such as the Adaptation Fund, the Global Environment Facility, and two other GEF trust funds that are available to provide small scale, project level grant financing. The Clean Technology Fund should concentrate on large scale funding opportunities where grant funding or concessional lending can leverage larger bilateral and multilateral lending operations and/or private sector finance.

Third, the World Bank has the ability to influence national development frameworks in developing countries. Most other public sector climate change financial vehicles are the domain of environment ministries, which tend to be politically weak. The World Bank is in dialogue with ministries of finance and planning and well as line ministries, and thus is in a position to ensure that clean energy pathways, as well as climate change resiliency and forest conservation, are mainstreamed into the core development planning frameworks of the countries were it works. Historically, the World Bank's track record with respect to mainstreaming environment in national poverty reduction strategies has been poor. It will need to do better with respect to climate change and clean energy

going forward if it is to remain a credible development agency in any future international climate change financial architecture.

Fourth, the World Bank has the ability to use the Clean Technology Funds as a way to leverage its own, much larger energy, transportation and infrastructure lending portfolios. 15 years ago the environmental community hoped that GEF climate change projects would be able to leverage the much larger World Bank energy portfolio; those hopes have not been realized, in part because of the size of GEF projects relative to World Bank projects. Now however the significantly larger funding opportunities, focused on a handful of key countries, may be able to do a better job of influencing the World Bank's larger portfolio. The record to date is mixed. Since the World Bank established its Clean Energy Investment Framework, it has doubled its energy sector lending from about $4 billion to about $8 billion and the percentage of so-called "low-carbon" projects increased from 28% to about 40%. The good news is that the percentage of low carbon projects is increasing; the not-so-good news is that the absolute amount of World Bank financing for "high carbon" projects is also increasing. Again, to be a credible part of any future international financial architecture for climate change, the World Bank will need to further "clean" its own portfolio and demonstrate that it facilitates policy change in its client countries. The CTF should be able to help it do this.

If the CTF is to realize its goal of catalyzing global action to reduce greenhouse gas emissions, it must be administered in a transparent and inclusive manner. It is important that developing countries see and acknowledge the benefits of this Fund, which can inspire them to greater action. Good "donorship" means being responsive to the demands of the recipient / borrowing countries and working in line with the Paris Declaration on Aid Effectiveness principles. Success is when the major middle income developing countries make the political switch themselves to a low-carbon future. The role of the Clean Technology Fund should be to reduce the costs of doing that and to demonstrate policy approaches and projects that are replicable at a scale that matters so that developing countries will be willing to take on new commitments by 2009 and undertake new development pathways by 2012. The energy, infrastructure and transportation sector investments made today will likely be with us for 30-40 years. That makes it essential that we do everything we can to assist rapidly growing developing countries to lock in low-carbon investments today.



# U.S. TREASURY DEPARTMENT OFFICE OF PUBLIC AFFAIRS

**EMBARGOED UNTIL** 1:30 p.m. (EDT), June 5, 2008
**CONTACT** Rob Saliterman, (202) 622-3431

## UNDER SECRETARY FOR INTERNATIONAL AFFAIRS DAVID H. MCCORMICK TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCIAL SERVICES, SUBCOMMITTEE ON DOMESTIC AND INTERNATIONAL MONETARY POLICY, TRADE, AND TECHNOLOGY

**Washington, D.C.** – Chairman Gutierrez, Congressman Paul, Members of the Committee, thank you for the opportunity to discuss an issue of global importance with you today – the Clean Technology Fund (CTF).

The CTF is a new multilateral effort to reduce the growth of greenhouse gas emissions in developing countries by helping to finance additional costs of deploying clean energy technologies over dirtier and usually cheaper alternatives.

The President's Fiscal Year 2009 budget includes a $400 million appropriations request for the initial U.S. contribution to the CTF, which will be housed at the World Bank where it will leverage the capital bases of the multilateral development banks (MDBs) and the donations of other contributing countries. The Administration has requested authorization from Congress to commit $2 billion to the multilateral fund over the next three years. We are aiming, along with our donor partners in the G-8 and beyond, at a global effort of up to $10 billion over the next three years with the U.S. as the lead donor.

**What Is the Problem?**

Let me outline for you the magnitude of the problem that the CTF aims to address and why it is so critical that the United States Government support it.

Since 2002, emerging and developing economies have been responsible for about two-thirds of global GDP growth. While this unprecedented expansion has brought economic

opportunities and higher standards of living to these previously impoverished countries, it has also led to surging demand for energy in the power, transport, building, and industrial sectors.

In addition to contributing to higher global energy prices, this accelerating increase in energy demand has led to an alarming growth in greenhouse gas emissions in developing countries. In fact, the greenhouse gas emissions of emerging and developing economies are rising more rapidly than the emissions of developed countries and will soon surpass them. According to the International Energy Agency, by 2030, global demand for energy will increase by over 50%, with almost three fourths of this increase coming from a handful of developing countries (Brazil, China, India, Indonesia, Mexico, and South Africa).

Currently, most developing countries are focused on pursuing the most cost-effective way to grow their economies, feed their citizens, and raise their standard of living. Thus, they tend to invest in the available energy technologies that can provide them the most economic output at the least cost. However, each time they invest in a dirty technology, such as a sub-critical coal plant with a 30 year life span, the harder and more expensive it will be for them to mitigate the resulting climatic effects in the future.

Estimates of the cost to encourage investments in lower carbon energy technology and infrastructure could be enormous. The World Bank estimates that the price tag to pay for the incremental costs to deploy clean energy technologies in the power sector alone in the developing world will be $30 billion annually.

If we take no action to provide developing countries with the right incentives, their investments today could lock in a legacy of highly-polluting, less efficient technologies for which we would all eventually pay through the accelerated effects of climate change.

**What is the Response?**

In response to this growing global challenge, the United States, UK, and Japan, have been working multilaterally with other G-8 countries and other potential donor and recipient countries to create an international clean technology fund to help developing countries deploy clean energy technologies. Since September 2007, Secretary Paulson, at the request of President Bush, has led U.S. efforts to negotiate the development of the Fund with our international partners. In his 2008 State of the Union, President Bush highlighted the fund.

The proposed Fund has three major objectives: first, to reduce emissions growth in developing countries through the accelerated deployment of clean technologies; second, to stimulate and leverage private sector investment in existing clean technologies; and third, to promote international cooperation on climate change in the context of pursuing a future climate change agreement.

**How Will the CTF Work?**

The CTF will help developing countries finance the additional costs of deploying clean technologies over dirtier alternatives. In short, the CTF will help developing countries make the choice between deploying clean technologies and conventional technologies economically neutral. The CTF will not cover the entire cost of any project. It will help cover that portion of a project cost needed to reach the point of economic viability. National governments and private sponsors will be responsible for the bulk of project financing.

The CTF will be a multilateral trust fund administered by the World Bank, and implemented through all of the multilateral development banks (MDBs). It will be able to leverage the resources of the MDBs--which collectively lent over $55 billion in 2007 for international development--and the private sector to finance clean technology projects.

The Fund will invite developing countries, with an emphasis on those with high expected emissions growth, to submit requests for CTF support to finance energy, transport or other projects with significant emissions reduction potential, including large-scale energy efficiency projects. To be eligible to receive funds, developing countries will be required to work with the World Bank to develop investment strategies that are based on national plans for low carbon growth.

The Fund will use a mix of concessional loans, grants, equity investment, and credit guarantees to finance any additional cost of deploying clean technologies. For example, if the difference between building a traditional fossil fuel power plant and a wind farm in a recipient country were $10 million, the CTF could help the recipient country finance the additional cost associated with the wind farm. This support would come as part of an overall financing package for the project that would involve MDB loans or guarantees as well as international private financing and local resources.

**Status of the Fund**

The United States, the United Kingdom, and Japan are currently working with other potential donors in the G-8 and beyond to launch the CTF later this summer with project funding likely beginning by the end of the year.

Most recently, on May 21 and 22, representatives from the Treasury Department participated in the final design meeting for the CTF hosted by the World Bank in Potsdam, Germany where potential donor and recipient countries reached agreement on general parameters of how the fund will work and how it will be governed. There is now broad support for the CTF among donor and recipient countries alike.

I want to underscore the significance of this broad support. Given the very different views in the developed and developing countries on how to address climate change, I believe that this support for the CTF presents the United States with a unique opportunity.

Through U.S. leadership and involvement, I believe that the CTF will do more than make an immediate impact on emissions growth in the developing world. I believe that it will contribute to building the kind of trust between developed and developing countries that will be necessary if a new UN climate arrangement is to be reached.

**Conclusion**

The CTF is one important step that the United States can take along with the other developed countries to demonstrate leadership and to contribute constructively to broader international efforts to mitigate the effects of climate change on our planet and its people.

I look forward to working with Congress on this effort and welcome your questions.

Thank you.

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# US CONTRIBUTIONS TO A WORLD BANK ADMINISTERED CLEAN TECHNOLOGY FUND

## TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCIAL SERVICES, U.S. HOUSE OF REPRESENTATIVES JUNE 5th, 2008

**JACOB WERKSMAN**
**DIRECTOR, INSTITUTIONS AND GOVERNANCE PROGRAM**
**WORLD RESOURCES INSTITUTE**

**Summary**

The proposed Congressional appropriation of $400 million per year over five years to support the deployment of clean energy technologies in developing countries could demonstrate much awaited United States leadership in responding to the global crisis of climate change. If these resources are invested wisely, the benefits will reach under-served communities in developing countries in desperate need of more reliable energy and cleaner air. Successful investments would also demonstrate to United States policymakers, energy producers and investors, the feasibility of reducing energy sector emissions by adopting changes in our own technology mix. If combined with United States policies that cap and reduce domestic emissions, that support a global deal to combat climate change, and that help build the resilience of communities vulnerable to climate change, a significant investment in clean energy would represent an important contribution to avoiding the worst impacts of global warming.

$2 billion over five years would dedicate an unprecedented amount of United States funding to clean technology in developing countries. It must, however, be emphasized that this will represent a small contribution towards the trillions of dollars necessary to meet global energy demand. Congress must therefore ensure that these resources and the institutions entrusted with managing them are committed to leveraging the greatest impact possible on investment choices in the energy sector worldwide.

Climate change and clean energy are not new issues for the World Bank, and its record in helping developing countries integrate climate change into economic development is mixed. The Bank has played an important role in pioneering new approaches to financing clean energy including through the use of carbon markets. Nevertheless, a recent study carried out by WRI reveals that the Bank has systematically overlooked opportunities to support the deployment of clean energy technologies, to mitigate emissions and to reduce climate risks. As late as 2007, more than 50% of Bank energy sector financing did not include climate change considerations at all. We therefore believe that any US investment in the CTF to support transitions to sustainable energy in developing countries should leverage a transformation of the Bank itself, in accordance with the following guidelines:

**1) A Clean Technology Fund should leverage transformative technologies and support progressive policies**

Congress should act to ensure that any public resources invested in the CTF support the deployment of technologies and policies that promote a profound shift away from carbon-intensive fuel sources. The CTF should be guided by principles that support this shift without pre-determining choices that should rest with developing country stakeholders and respond to local needs. The CTF should therefore, as the World Bank has suggested, promote transformational change while remaining technology neutral. Its investments should prioritize "zero carbon"

outcomes in the power sector, improvements in energy efficiency in existing power generation infrastructure, and it should favor investments that are shown to contribute to poverty alleviation. These principles would guide the CTF away from support for investments in technologies, such as supercritical coal plants, that are only marginally less GHG intensive and that are already more cost effective than conventional coal.[1] These principles should guide the CTF towards renewable energy sources, and investments in public transportation and energy efficiency that benefit poor consumers by lowering costs and increasing access and security of supply. The CTF will, however, need to address the likely continued reliance of many developing countries on coal. For new coal-fired generation facilities, carbon capture and sequestration may be able to play an important role in reducing emissions, if the many risks and uncertainties associated with these technologies can be reduced. CTF resources should also be available to build research and development capacity within developing countries to develop new technologies that are appropriate to local needs. Finally, developing countries should also be able to seek financial and technical support for improvements in policy and regulatory frameworks that will promote investment in clean technologies.

**2) Transformation should begin with the World Bank's core energy portfolio**

Any Congressional appropriation to the CTF should promote the transformation of the core energy portfolios of the Multilateral Development Banks, including the World Bank, the Inter-American Development Bank, the African Development Bank, and the Asian Development Bank. The CTF envisions a role for the World Bank as Trustee, and for all the major MDBs as implementing agencies. Through MDB negotiated Country Assistance Strategies and internal bank procedures, MDB management and staff will have a direct influence on the programming of CTF resources. This should be seen as an opportunity for the Banks to demonstrate a commitment to integrating climate change considerations into all aspects of their core operations. The Banks should rigorously measure and manage the GHG emissions associated with its investments in all relevant sectors. The Banks should consistently work with developing country clients to identify low carbon approaches to development. Congress should use this opportunity to benchmark and monitor a higher standard of portfolio performance for all the Multilateral Development Banks that will have access to CTF resources.

**3) The CTF should operate in accordance with widely accepted principles reflected in the United Nations Framework Convention on Climate Change and other sustainable development instruments**

It is essential that Congress plays a leadership role in a global response to climate change. Providing financial support for clean technology in developing countries will be a key part of that response. If these resources are to leverage change equal to the challenge of global warming they must be managed with credibility and legitimacy that catalyzes domestic policy reform, and inward private and public investment in developing countries. Ensuring that the CTF follows internationally agreed principles, reflected in the UNFCCC and other international instruments will be key to its legitimacy. These principles respect the right of each country to determine its own development path consistent with the Convention's objective to stabilize greenhouse gas emissions at safe levels. Donor governments should be prepared to demonstrate how support for the CTF is new and additional to development assistance targeted at poverty alleviation and other developing country

[1] Supercritical coal technologies achieve efficiency rates of 40 – 60% compared to regular subcritical coal fired power plants which have efficiency rates of 20 – 30%. Their increased efficiency means that they require less coal fuel to produce the same amount of electricity, and as a result their operating costs are significantly lower than subcritical coal.

priorities. The source of the technology should not be "tied" to the nationality of the donor. The administration of the Fund should be guided by principles of transparency, inclusiveness and accountability, through the proactive disclosure of information upon which decisions are based, a balanced representation of developed and developing countries, and meaningful opportunities for civil society input and oversight. Its governance structures should be run by policymakers selected on the basis of their independence and expertise as well as their capacity to represent diverse interests. Overall, support from the US and other donors in the design and implementation of a CTF should be based on a partnership that incentivizes developing countries to take meaningful actions to reduce their emissions while promoting their own sustainable development priorities.

**Background:**

**Increased support for the deployment of clean technologies is needed**

Worldwide, more than 60% of global greenhouse gas (GHG) emissions come from the energy sector, where most countries continue to depend on polluting fuels and inefficient technologies. In most developing countries the need to sustain economic growth and alleviate poverty is increasing demand for energy. The rising costs of conventional fossil fuels such as oil, and growing concerns about energy security, together with growing awareness of the realities of climate change are sparking new interest in alternative options for meeting energy needs in all countries. There are significant opportunities to improve the efficiency of systems, and to increase the deployment of clean and renewable energy technologies. The realities of climate change demand fundamental transformations in how all countries produce and use energy. Making funds available to support the deployment of clean technologies to meet and reduce demand for energy can be an important contribution to this goal.

The proposed US contribution to a CTF would be administered by the World Bank as one of a portfolio of "Climate Investment Funds" that will "provide concessional finance for policy reforms and investments that achieve development goals through a transition to a low carbon development path and a climate resilient economy."[2] More than 10 countries are expected to contribute to this significant multilateral effort, including the United Kingdom ($1.58 billion over 3 years) and Japan (which is expected to commit at least $995 milllion).[3]

While the proposed CTF would make an unprecedented amount of dedicated financing for clean technology available, these funds will not be adequate to meet the full costs of deploying clean technologies at the necessary scale. The International Energy Agency predicts that developing countries will need more than $15 trillion of investment in their energy sectors by 2030. The proposed US contribution of $2billion over the next 5 years is a relatively small sum of money by comparison, and will need to be used strategically to catalyze truly transformative changes to help developing countries transition to a sustainable energy future.

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[2] As of May 2008, the World Bank proposes to establish a Strategic Climate Fund (SCF) that will support efforts to build resilience to climate change, in addition to the CTF. Regional MDBs including the Asian Development Bank, Inter-American Development Bank, and European Bank for Reconstruction and Development will also have access to the clean technology funds to implement projects.

[3] Reuters, "Climate fund seen totaling $5.5 billion," 28 May 2008.

**The Clean Technology Fund should leverage transformative technologies and support progressive policies**

In designing the Clean Technology Fund, the World Bank intends to support large scale emission reductions, and catalyze momentous changes in how energy is used and produced. The Bank has proposed that the funds should be technology neutral so that the most appropriate technologies for local needs can be deployed at a large scale. A shortfall of investment in clean technologies is not the only barrier to transforming the energy sector. In most countries, policies and regulations tend to emphasize short term cost and supply considerations, rather than the long term benefits of cost savings, enhanced energy security and environmental performance offered by clean technologies. A combination of regulatory and market failure has led to energy prices that do not reflect the true costs of fossil fuels to public health, to the local environment and to the climate system. Decision-making in the energy sector tends to be both exclusive and non-transparent, dominated by interests with a stake in "business as usual" practices. Policy innovations that promote full cost analysis of technology options and more transparent, inclusive and accountable decision-making, are essential to leveling the playing field for renewable energy technologies.

*Financial resources are needed to support reforms in policy and regulatory frameworks that promote the supply of and demand for renewable, low carbon and energy efficiency technologies and practices.* These might include mechanisms such as demand side management systems such as incentives to encourage efficiency, feed-in tariffs for renewable energy, and renewable energy portfolio standards. In addition to supporting countries that decide to undertake these reforms, Congress should do more in the United States to demonstrate to the rest of the world how better energy policy can ensure clean energy innovation.

*If policy reforms are to take hold, they must be developed and implemented through transparent, open and credible processes.* Citizens and civil society have an important role to play in ensuring that such measures are well suited to local needs and realities. Support for policy reforms in developing countries should not lead to narrow prescriptions on technology choice, or strategies designed to force unrelated economic reforms. Such approaches are likely to undermine the legitimacy of reforms for domestic audiences in developing countries and could sour international negotiations on new commitments for developing country actions.

*The CTF's emphasis on energy efficiency and on opportunities to support sustainable mobility through improved access to effective public transportation systems, is welcome and needed.* Increasing access to efficient and effective public transportation systems, particularly in cities, is an urgent priority in developing countries and can have significant environmental and social benefits. The proposed emphasis on opportunities to improve efficiency more broadly, including in buildings is also an important initiative. However, the Bank's current proposal on the fund suggests that the CTF could also support the adoption of best available coal technologies, and switching from coal to natural gas, to achieve such reductions.

*Best available coal technologies such as supercritical coal are already more cost effective than conventional sub-critical coal in most cases.* The operating costs of such plants are significantly lower than subcritical coal because they require less fuel inputs. While natural gas fueled power may be less greenhouse gas intensive than conventional coal fired power, such technologies still produce significant volumes of greenhouse gas, particularly when emissions are calculated on a lifecycle analysis basis, and are already widely deployed on a commercial basis. It would be a poor use of scarce public resources to address climate change, to support investments in marginally less GHG intensive technologies that

are already more cost effective than conventional coal, and will still emit large amounts of carbon for decades to come.

*Distributed renewable energy technologies, and some energy efficiency programs are likely to have more direct benefits for poverty alleviation.* As the Bank proposal on the CTF recognizes, transmission and distribution infrastructure already suffer from chronic under-investment and maintenance. An emphasis on the "distribution" component of distributed energy, will be necessary in order to begin to make smaller scale renewable energy technologies competitive with large centralized grid solutions.

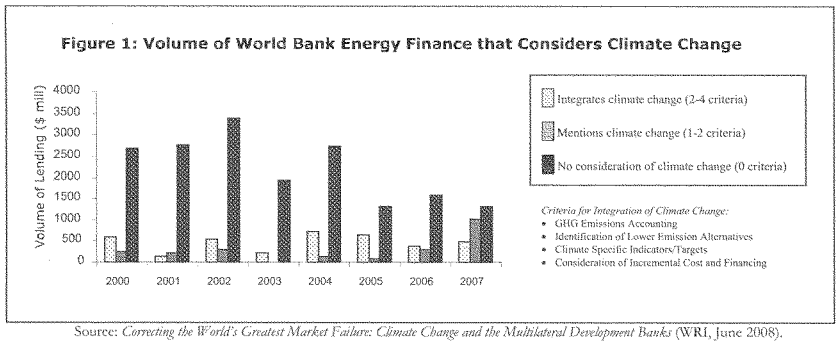
*New solutions to the climate impacts of coal are needed.* Improving the efficiency of existing coal fired facilities can make a crucial contribution to this end. For new coal facilities, emerging carbon capture and sequestration technologies may be able to play an important role in reducing emissions from established centralized energy systems to power economic growth. This technology has attracted significant interest, particularly in the fast growing economies of Asia which are highly dependent on coal for their energy needs. However, the risks and uncertainties around these technologies remain high.

*The CTF should also be used to build in-country capacity to do research and development for new technologies.* Many middle-income countries already have very significant technical and scientific capacity, and there is a wide body of experience to suggest that such expertise can help tailor new technologies to be more appropriate to national needs. Given that in many countries energy service infrastructure remains – often for very good reasons—in public hands, building public research and development capacity could perhaps facilitate the deployment and commercialization of such technologies.

*The priority of the Clean Technology Fund should be to support "zero carbon" technologies in the power sector such as renewable energy, and improvements in energy efficiency in existing power generation infrastructure. Creative use of the Clean Technology Fund resources could deliver significant results in reducing the costs of promising zero carbon technologies to facilitate their deployment at large scale. Congress should seek clear and ambitious principles to guide the choice of most the most appropriate "clean" technologies for national needs.*

**Transformation should begin with the World Bank's core energy portfolio**

The World Bank can play an important role in supporting the deployment of clean technologies in rapidly growing developing countries. The Bank has recognized that it can do more to mainstream climate change into its efforts to support economic development. WRI analysis presented in the brief, *Correcting the World's Greatest Market Failure: Climate Change and the Multilateral Development Banks,* reveals that operationally, opportunities to support the deployment of clean energy technologies to mitigate emissions and reduce climate risks are still not systematically incorporated into policies and projects supported by the World Bank.




Source: *Correcting the World's Greatest Market Failure: Climate Change and the Multilateral Development Banks* (WRI, June 2008).

*Climate change considerations need to be mainstreamed into decision-making at the World Bank.* Overall, attention to climate change and opportunities to support the deployment of clean energy technologies in World Bank Country Assistance Strategies (CAS), the documents used by the Banks to plan support to borrowing countries, remains inconsistent. Of 54 CASs reviewed, only 32 mention opportunities for GHG mitigation in sector level interventions; and 18 identify concrete targets or outputs to this end. As late as 2007, nearly 50 percent of World Bank lending for the sector did not consider climate change issues at all, and over the last three years less than 30 percent of its financing has comprehensively integrated climate change considerations (See figure 1).

*The use of the Clean Technology Fund to support renewable energy and energy efficiency in middle income countries such as China, India, Brazil and Indonesia can help the MDBs find new relevance in these countries.* The World Bank, and other MDBs such as the Asian Development Bank, Inter-American Development Bank, who would be entrusted with programming the Clean Technology Fund remain heavily invested in "business as usual" projects. Commercial private sector capital is now widely available, particularly in middle income countries, for such projects. It is essential that the World Bank consistently help member countries assess the full suite of options for low carbon, climate resilient development. Private financing for renewable energy technologies and energy efficiency programs is much less readily accessible, and urgently needed.

**Table 1. Climate Change Considerations in Energy Pipelines of the World Bank, IFC, ADB and IDB**

| | World Bank | | | | | | IFC | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Integrates | | Mentions | | Ignores | | Integrates | | Mentions | | Ignores | |
| | M$ | % | m$ | % | m$ | % | m$ | % | m$ | % | m$ | % |
| **2000** | 583.2 | 16.5 | 254.5 | 7.2 | 2697.1 | 76.3 | 0 | 0 | 0 | 0 | 460.4 | 100.0 |
| **2001** | 135.8 | 4.3 | 220.6 | 7.1 | 2759.7 | 88.6 | 0 | 0 | 0 | 0 | 143.6 | 100.0 |
| **2002** | 542.7 | 12.8 | 306.5 | 7.2 | 3383.6 | 80.0 | 150.0 | 43.4 | 18.0 | 5.2 | 177.3 | 51.4 |
| **2003** | 219.0 | 10.0 | 30.0 | 1.4 | 1938.8 | 88.6 | 18.5 | 2.0 | 470.0 | 51.9 | 435.0 | 48.1 |
| **2004** | 732.6 | 20.4 | 128.5 | 3.6 | 2731.7 | 76.0 | 0 | 0 | 40.0 | 12.5 | 281.0 | 87.5 |
| **2005** | 652.0 | 31.9 | 86.0 | 4.2 | 1304.0 | 63.9 | 0 | 0 | 335.0 | 66.0 | 172.4 | 34.0 |
| **2006** | 364.0 | 16.2 | 293.7 | 13.1 | 1588.3 | 70.7 | 0 | 0 | 85.0 | 13.1 | 566.3 | 86.9 |
| **2007** | 486.2 | 17.3 | 1015.8 | 36.2 | 1302.7 | 46.5 | 50 | 5.4 | 621.0 | 66.9 | 257.0 | 27.7 |
| **Total** | **3714.5** | **15.6** | **2335.8** | **9.8** | **17706.9** | **74.5** | **218.5** | **5.1** | **1569** | **36.7** | **2493.0** | **58.2** |

| | ADB | | | | | | IDB | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Integrates | | Mentions | | Ignores | | Integrates | | Mentions | | Ignores | |
| | M$ | % | m$ | % | M$ | % | m$ | % | m$ | % | m$ | % |
| **2000** | 0 | 0 | 53.0 | 13.2 | 350.0 | 86.8 | 0 | 0 | 0 | 0 | 1169.0 | 100.0 |
| **2001** | 8 | 1.4 | 350.0 | 62.84 | 199.0 | 35.7 | 0 | 0 | 375.0 | 29.1 | 915.0 | 70.9 |
| **2002** | 308 | 30.5 | 223.0 | 22.0 | 480.0 | 47.5 | 0 | 0 | 0 | 0 | 178.0 | 100.0 |
| **2003** | 35 | 3.4 | 54.0 | 5.3 | 938.0 | 91.3 | 0 | 0 | 0 | 0 | 379.0 | 100.0 |
| **2004** | 188 | 23.4 | 0 | 0 | 615.0 | 76.6 | 0 | 0 | 0 | 0 | 136.0 | 100.0 |
| **2005** | 0 | 0 | 285.0 | 23.9 | 909.0 | 76.1 | 0 | 0 | 0 | 0 | 1202.7 | 100.0 |
| **2006** | 1317 | 32.8 | 20.0 | 0.5 | 2682.0 | 66.7 | 30.0 | 2.0 | 582.0 | 38.0 | 919.0 | 60.0 |
| **2007** | 982 | 61.2 | 615.0 | 38.32 | 8.0 | 0.50 | 40.0 | 11.7 | 0 | 0 | 300.5 | 88.3 |
| **Total** | **2838** | **26.7** | **1600.0** | **15.1** | **6181.0** | **58.2** | **70.0** | **1.1** | **957.0** | **15.4** | **5199.2** | **83.5** |

Source: *Correcting the World's Greatest Market Failure: Climate Change and the Multilateral Development Banks* (WRI, June 2008).

*GHG accounting is a critical tool to help identify opportunities for energy efficiency, and identify cleaner options for meeting energy needs.* Although several MDBs have adopted GHG accounting practices for their direct operations as well as their investment portfolios, these efforts have yet to be operationalized. Current practice at the MDBs still does not yet consistently explore less carbon-intensive approaches to economic development. If MDBs can help build the capacity of actors and institutions in developing countries, such as electricity utilities and ministries, to measure and manage GHG emissions, they may have a substantial impact on helping reduce future emission trajectories.

*MDBs can help developing countries assess alternative approaches that might help countries reduce carbon emissions while still meeting their development objectives.* The decision as to which of these options will best meet needs for environmentally sustainable economic development will necessarily remain with developing countries. Money from the Clean Technology Fund could be made available to help meet the incremental costs of cleaner choices if MDBs conducted such analysis on a systematic basis.

World Bank Country Strategies need to identify how sectoral policies will affect emissions trajectories in client countries and how these strategies will be affected by predicted impacts of climate change. The goal of such integration should be to increase the quality of information and the range of choices available to decision makers, without locking client countries into prescribed policies or technologies.

*In order for the Clean Technology Fund to have a transformative impact, climate change considerations and measures to support the deployment of clean technologies must be reflected in all aspects of World Bank interventions in relevant sectors. Representatives of the US government on the Board of Executive Directors of the World Bank Group can play an important role in monitoring progress to this end.*

**The CTF should operate in accordance with widely accepted principles reflected in the UNFCCC and other sustainable development instruments**

It is essential for the US to play a constructive leadership role in a global cooperative effort to respond to climate change, and an important step to this end is to ensure that the administration of the Clean Technology Fund is consistent with the principles of the UNFCCC. Several observers have expressed concerns that activities and programs implemented through the Climate Investment Funds and the Clean Technology Fund in particular may undermine or predetermine the outcomes

of global negotiations on technology transfer and financing through the UN Framework Convention on Climate Change (UNFCCC).

*The CTF should help pave the way to a global agreement on climate change through the UNFCCC.* The negotiations at the recent meetings of the parties to the UNFCCC and Kyoto Protocol in Bali at the end of 2007 kicked off a critical two year process, which will have to result in a more detailed vision of concrete actions that will result in a meaningful response to climate change. The road map that all countries including the US agreed upon in the Bali Action Plan has created an important strategic opportunity to help exploit synergies between the demands of development and poverty alleviation, and opportunities to mitigate climate change.

*US support for the Clean Technology Fund should be additional to continued and increased support for poverty eradication and economic development across the world.* The US can do much more to support the pervasive challenges of poverty that afflict millions of people around the world. While funds made available to support the deployment of clean technologies in developing countries must complement foreign assistance for poverty and development, and not detract from these programs. Indeed, a new challenge for the US going forward will be to ensure that initiatives supported by foreign assistance are consistent with the goals and objectives of the UNFCCC.

*The US should make sure that funding is made available on a grant basis to support the incremental costs of using clean technologies instead of fossil fueled or inefficient technologies.* Given that developed countries are responsible for the majority of the greenhouse gas emissions that have accumulated in the atmosphere to date, the UNFCCC recognizes that developed countries should support developing countries to respond to the challenges of climate change. By making these grant funds available the US can help developing countries make more sustainable choices, without unduly penalizing them for a problem they did not cause.

*Balanced representation of developed and developing country governments in administration of the CTF is crucial.* The World Bank in consultation with a range of stakeholders has proposed an equitable governance structure for the CTF that includes equal representation of donor and developing country governments on the Trust Fund Committee. This is important to ensure that developing country perspectives are adequately represented in decision-making on how to use the funds.

*It will be essential to maintain the highest standards of transparency and inclusiveness in the design of programs and projects that are supported by the clean technology funds.* The successful deployment of clean energy technologies to catalyze low carbon development requires wide ranging public debate. Current proposals on governance of the fund propose an annual partnership forum on the Climate Investment Funds that would include civil society, but this provision seems inadequate to ensure a robust level of citizen input. A more formal role for representatives of civil society in the governance of the fund – perhaps as an independent technical expert –would be valuable.

*The Fund must operate on the basis of maximum disclosure.* Adequate information on the choices that the various governing committees of the Clean Technology Fund are making and on their decision-making processes must be easily accessible in the public domain with adequate time for interested parties (particularly stakeholders in developing countries implementing clean technology programs) to be informed and engaged. A very narrow range of legitimate exceptions (such as for truly business confidential information - proprietary information, trade secrets, etc.) should apply. Early disclosure of documentation on proposed "low country" programs to be supported by the fund, and of project

proposals before they are approved by the Trust Fund Committee are essential. Timely public monitoring of the implementation and impacts of projects and programs funded by the CTF are also needed.

*These provisions for transparency and inclusiveness take on even greater importance in light of the links between programs implemented with the Clean Technology Fund and international negotiations through the UNFCCC.* Making such information easily available can play an important role in ensuring that stakeholders in the UNFCCC negotiations are fully informed of developments, and so that these programs implemented with the fund do not predetermine the outcomes of negotiations on a post 2012 climate regime through established international processes.

*If administration of the Clean Technology Fund is consistent with the principles of the UNFCCC, programs implemented have the potential to demonstrate to developing countries that they can in fact take meaningful low carbon actions to promote their own sustainable development priorities, with real support from developed countries such as the US.*

**Should Congress Authorize a Multilateral Clean Technology Fund?**

**Should the World Bank Administer It?**

Statement before the U.S. House of Representatives Financial Services Subcommittee on

Domestic and International Monetary Policy, Trade, and Technology on

"Examining the Administration's Proposal to Establish a Multilateral Clean Technology Fund"

David Wheeler

Senior Fellow, Center for Global Development

June 5, 2008

Thank you Chairman Gutierrez, Congressman Paul and distinguished members of the subcommittee for inviting me to participate in today's hearing.

I would like to begin with a brief tale of two possible clean technology funds, whose different consequences will have enormous implications for our children and grandchildren. Imagine, if you will, that it is now 2015, seven years after the creation of a multilateral fund for clean technology. In Scenario 1, the World Bank's Clean Technology Fund (CTF) has provided developing countries with billions of dollars to make coal-fired power plants and other energy projects marginally more efficient, but has done little to stem the alarming rise in greenhouse gas (GHG) emissions. The catastrophic nature of rapid climate change, including droughts, floods, fires, falling agricultural productivity, and a swelling tide of climate refugees, is increasingly evident and universally understood. But precious time has been lost. We are on course for a planetary disaster.

In Scenario 2, the U.S. Congress, led by the decisions of this committee, has insisted that the World Bank use the Clean Technology Fund to catalyze deployment of climate-friendly renewable energy on a very large scale. Private companies competing for billions of dollars in World Bank-funded contracts have rapidly driven down the cost of zero-carbon electricity. Renewable energy options such as solar thermal power are now cheaper than coal and other fossil fuels, and provide a growing share of base load power around the world. Seven years later, we are on course for a major success in the struggle against climate change.

Both scenarios are utterly plausible. The decisions that this committee makes will determine which path we follow. Do we collectively have the strategic vision to seize this enormous opportunity? If we fail, future generations—including our own grandchildren—will surely ask: "Why didn't they do something more?"

**WHY WE NEED THE CLEAN TECHNOLOGY FUND**

**1. The Climate Crisis**

U.S. leadership in the creation of a well-designed Clean Technology Fund is crucial. If humanity is to avoid potentially-catastrophic climate change, rapid reductions in greenhouse gas emissions must occur in the very near term. Global carbon dioxide ($CO_2$) emissions from the combustion of fossil fuels are now exceeding even the most pessimistic scenarios produced by the Intergovernmental Panel on Climate Change (IPCC) in the late 1990's (Raupach et al., 2007). At the same time, observed climate change is occurring more quickly than previously expected. Paleoclimatic evidence suggests that preserving a climate congenial to civilization will ultimately require atmospheric $CO_2$ concentrations to decline from present levels (~385 ppm, rising by 2+ ppm annually) to no higher than 350 ppm (Stroeve et al., 2007; Hansen et al., 2008).

Uncertainties about short-term climate sensitivity and the precise timing of global warming do not imply that we should wait until further evidence is available. Rather, they highlight the necessity of immediate action to counter the risks inherent in the climate system by bringing down emissions.[1] Business-as-usual scenarios suggest energy-related emissions could be 37-40 gigatons (Gtons) $CO_2$ by 2025.[2] Given a range of short-term temperature and long-term concentration objectives, basic emissions modeling suggests that an aggressive short-term target could reduce fossil fuel $CO_2$ emissions by one-third, to 25 Gtons in the same time period.[3]

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[1] See: http://blogs.cgdev.org/globaldevelopment/2008/03/the_dismal_climate_science_on_1.php

[2] Low-end estimate from EIA (2007) reference case projection. High-end estimate takes projected annual rate of emissions growth from McKinsey (2007) and extrapolates to 2020. Both assume a global GDP growth rate of 3.2% annually (market exchange rates).

[3] Based on modeling using the SiMCaP EQW-PATHFINDER program developed by Malte Meinshausen and Bill Hare (www.simcap.org). Objectives included combinations of: average warming below 2C over preindustrial levels, peak concentration of 425 ppm, and long-term stabilization at 350 ppm. See also Baer and Mastrandrea (2006) and Meinshausen (2005) for more on emissions pathways and the probability of dangerous climate change.

**2 The Urgency of Low-Carbon Electric Power for Developing Countries**

Inexpensive low-carbon electricity, especially for the developing world, must be a part of any plan for addressing climate change for four reasons.

- First, international negotiations and national GHG emission targets in the U.S. and other rich countries cannot achieve the necessary reductions in $CO_2$ and other greenhouse gases. As you know, the Senate has just begun to consider ambitious cap-and-trade legislation, and even optimists do not expect the legislation to be enacted soon. If the U.S. and European Union succeed in implementing current proposals, and other developed countries respond similarly, total fossil-fuel $CO_2$ emissions from Kyoto Protocol Annex 1 countries in 2020 could be as low as 10 gigatons (Gtons).[4] In that case, an overall global target of 25 Gtons would leave 15 Gtons for low- and middle-income countries, the non-Annex 1 countries in the Kyoto Protocol. But current emissions from the developing world are already about 14 Gtons $CO_2$ and possibly higher, so energy-related emissions in these countries would have to flat-line between now and 2020 to achieve the overall target. This is clearly unrealistic given existing economic realities, social equity considerations, and the fact that developing countries show no indication of submitting to binding reductions. National emission targets are indisputably valuable, especially as signals of political commitment, but they have little chance on their own of meeting sufficiently aggressive short-term goals.
- Second, it is unreasonable and, in many respects, unfair to expect people in the developing world to restrain the growth in their energy consumption, which

[4] Emissions figures presented here are extracted from International Energy Agency data. The 10 Gton CO2 figure assumes the EU reduces emissions 30% below 1990 levels and the U.S. and other Annex 1 countries reduce emissions by about 20% from 2005 levels by 2020.

continues to be just a tiny fraction of per-capita consumption in the U.S. and other rich countries. Moreover, whatever our views on this, the G77 and China have steadfastly insisted on this position in UN negotiations. At the same time, emissions from the developing world, even at low levels of per-capita consumption, are enough to create a climate crisis irrespective of the rich world's carbon legacy (Wheeler and Ummel 2007).

- Third, greatly increased zero-carbon electricity production is urgently needed to replace liquid fossil fuels used in transportation and other sectors. While cellulosic ethanol and other future biofuels may eventually contribute to a climate solution, current-generation biofuels may actually be accelerating climate change because producing them requires large amounts of fossil fuel and encourages more tropical deforestation. Moreover, as we have seen in recent weeks, using scarce cropland to produce ethanol for cars undermines our efforts to fight global hunger.
- Finally, even if we assume large energy conservation and efficiency improvements, shifting the global electric power sector to low- and zero-carbon systems provides the best opportunity to reduce carbon intensity quickly. Power and heat generation are responsible for over 27% of total $CO_2$ emissions, and the proportion is rising (IPCC, 2007). Focused programs for rapid improvement can work in this sector, because power-related emissions and corporate ownership are highly concentrated, and several clean energy technologies are relatively mature.

**3. The Clean Technology Fund Can Finance the Transition to Clean Electricity**

Given the importance of a rapid transition to climate-friendly power generation, the Bush Administration deserves credit for its leadership in proposing the Clean Technology Fund (CTF)

as a unique vehicle for promoting clean energy in developing countries. Moreover, the leadership of this committee deserves our thanks for asking how the CTF would actually function. Make no mistake: The Clean Technology Fund is urgently needed, and it can pay a massive return for American taxpayers and people around the world. But the CTF must be used strategically because, even if donor countries contribute tens of billions of dollars, the fund will be tiny compared to the capital requirements for retooling the power sector.

By 2020, perhaps one-quarter of existing generating capacity will need to be replaced and an additional 1400 gigawatts (GW) installed to meet new demand. If current trends continue, electricity will represent nearly 20% of total consumed energy in 2020 and possibly far more, if heating, transportation, and industrial demands evolve from direct fuel combustion to the use of electricity. Given these considerations, meeting short-term emissions goals will require a vast, rapid expansion of cheap, renewable electricity coupled with energy efficiency improvements and a rapid transition to widespread electricity use.

The most difficult part of the needed transition will be provision of reliable and carbon-free electricity at prices significantly lower than that of fossil-fueled generation. In February of this year, the Finance Ministers of the U.S., UK, and Japan acknowledged this need by proposing a Clean Technology Fund (CTF) to "help developing countries bridge the gap between dirty and clean technology." The initial U.S. contribution was originally estimated to be $2 billion over three years, subject to congressional authorization and appropriation (Paulson et al., 2008). It is expected that the international component of the UK's Environmental Transformation Fund ($1.5 billion over three years) and part of Japan's Cool Earth Partnership ($10 billion over five years) will be made available to the fund. Allocation of financing has been provisionally

assigned to the World Bank, which is still working on its final proposal for management of the CTF.

Current market conditions are extremely favorable for low-cost subsidization of clean energy, because the cost gap between clean and dirty technologies has narrowed considerably in just the last year. The prices of fossil fuels – most importantly coal – are at record-high levels as global demand increases far faster than supply can grow in the short term. The rise in international coal prices is akin to the imposition of a $30-per-ton $CO_2$ tax since early 2007. Accurate accounting of fuel prices moves many renewable technologies much closer to cost-competitiveness with fossil fuels.

We cannot count on continued price increases for fossil fuels to close the remaining gap, and most developing countries will not enact regulations to raise the price of carbon emissions in the near future. We therefore have only one realistic route to closing the gap and meeting critical short-term emissions targets: *The Clean Technology Fund (CTF) must be focused on making renewable energy cheaper than energy from fossil fuels (particularly coal).*

Without this strategic focus on cost reduction, there is no compelling rationale for the CTF. It should therefore focus explicitly on pushing key technologies down learning/cost curves as quickly as possible. Observed learning rates for renewable technologies are generally in the range of 10-20%, meaning that each doubling of installed capacity reduces the cost of production by 10-20% (Neij, 2008). For technologies starting at low levels of deployment, significant price reductions can be achieved in short periods of time as manufacturing scales increase, efficiencies improve, and price premiums associated with new-technology risk subside.

Solar thermal power provides a useful illustration, because it is one of the most promising renewable options for base load power. Solar thermal power (STP) uses direct sunlight and

mirrors to heat liquids, whose expansion drives high-efficiency electric generators. The generating potential of STP is nearly limitless, and the materials and processes required are relatively simple and well understood. Recent advances allow cost-effective storage of excess thermal energy during the day, so that generation can continue at night. A recent study indicates that public financing through the CTF can close the cost gap between solar thermal and coal-fired power in a 5-10 year program that expands capacity at 500-1000 MW/year (Wheeler and Ummel, 2008). We estimate that total Clean Technology Fund subsidies for this program would be $4 - $8 billion – easily within range for a serious multilateral effort.

## SHOULD THE WORLD BANK MANAGE THE CLEAN TECHNOLOGY FUND?

### 1. The World Bank's Record to Date

The value of a single multilateral fund lies in its ability to leverage contributions from a range of donors, but this must be weighed against legitimate concerns about objectives and management strategy. Meeting future energy demand will require $20 trillion in infrastructure investments between now and 2030, half of it in the developing world (IEA, 2006). Public financing through the Clean Technology Fund will never be more than a small fraction of overall investment in the global energy sector. If the World Bank administers the CTF, its policies will therefore be critical in determining the scale of private-sector adoption of clean energy technologies. Unfortunately, its recent record is not encouraging.

First, the World Bank's continued support for huge coal-fired power plants suggests that it is not yet serious about catalyzing the transition to clean energy. In April, the World Bank Group's private-sector arm, the International Finance Corporation (IFC), approved $450 million in financing for the 4,000 MW coal-fired Tata Ultra Mega power plant in India's Gujarat State.

The projected $CO_2$ emissions of this plant are 25-28 million tons per year, making it one of the world's largest point sources of global warming pollution upon completion (CARMA, 2008).

The project approval process for Tata Ultra Mega clearly suffered from out-dated cost assessments, faulty reasoning, and a lack of due diligence in identifying clean alternatives with higher net social benefits.[5] The IFC claims that its financing was required to ensure the use of marginally-cleaner supercritical (SC) coal combustion technology. In truth, the higher efficiency of SC technology makes it the cheapest way to produce coal-fired electricity at current coal prices, and companies in India are constructing SC power facilities without the use of scarce international financing.

Similar problems are apparent in the World Bank's consideration of financing for the 2,000+ MW Mmamabula coal-fired plant in Botswana. Again, the use of marginally-cleaner SC technology provides the main rationale, despite its being preferred by the private sector on the basis of cost alone.

Second, the World Bank's failure to adopt carbon accounting indicates that it is not yet prepared to think strategically about emissions reduction and unable to judge its progress toward that objective. Sometimes referred to as carbon shadow pricing, carbon accounting incorporates an estimated dollar cost, or charge, for every ton of $CO_2$ emitted by a proposed investment project. Several major U.S. investment banks have already extended their conventional cost accounting to include carbon charges for their analyses of energy project proposals. Unfortunately, no such accounting policy currently exists at the World Bank.

To illustrate the implications of this failure, a recent analysis shows that incorporating even moderate carbon pricing into appraisal of the Mmamabula coal-fired power project would make

[5] See: http://blogs.cgdev.org/globaldevelopment/2008/03/tata_ultra_mega_mistake_the_if.php

it preferable to invest in superior, clean alternatives (Wheeler, 2008). Even assuming lower-than-present coal prices, the pricing of carbon at approximately $35 per ton would prompt investors to consider switching to renewable solar thermal technology. For comparison, the current price of $CO_2$ emissions in the EU's Emissions Trading System is about $41/ton.[6]

As this example shows, the use of carbon accounting could greatly accelerate the adoption of renewable energy. In fact, the areas associated with both the Mmamabula and Tata Ultra Mega coal-fired power projects have plentiful solar energy.[7] Even in a densely-populated country like India, about 16,000 square kilometers (6,200 square miles) of barren land are suitable for solar thermal power production. This amount of land could conservatively generate 3.8 million gigawatt hours of electricity annually – more than five times India's current power production. Solar potential in other countries, including China, is even greater.

The per-ton charge required to facilitate a switch to renewable alternatives is well within the range of the estimated social costs of climate change, which will be borne primarily by citizens of the developing world. That the World Bank has no policy for, or experience with, incorporating such considerations into project appraisal is worrying, especially given its role as an investor of donor dollars for projects intended to improve the welfare of the world's poor. In the wake of these findings, a discussion has begun within the Bank on the topic of carbon pricing, but our sense is that bureaucratic inertia on this issue is considerable.

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[6] Daily quotes are available at www.pointcarbon.com.

[7] See: http://blogs.cgdev.org/globaldevelopment/2008/02/a_solar_future_for_the_world_b.php

**2. The World Bank's Draft Proposal for CTF Management**

The World Bank's own draft proposal for administering the Clean Technology Fund (World Bank, 2008) fails to recognize the necessity of either strategic focus on cost-competitive renewable energy or carbon accounting. Instead, it accommodates a very broad range of options, including supercritical coal projects, that will not put specific renewable technologies on the path to cost-competitiveness with fossil fuels. This approach will perpetuate the cost gap, ensure a continued dominant role for coal and other fossil fuels in developing countries, and eliminate the possibility of meeting critical emissions targets within the relevant time frame. The World Bank's proposal also makes no commitment to carbon accounting. It avoids any mention of carbon pricing, and its only explicit mention of emissions accounting is in a footnote about future methodology.[8]

These deficiencies suggest that the multiple agendas of the World Bank's diverse constituencies may prevent it from administering the Clean Technology Fund successfully. A close reading of the World Bank's successive CTF proposal drafts (four have been issued since April 3, the most recent on June 3) reveals the lack of a clear strategic vision, and a drift in the language as different constituents weigh in. For example, the April 29 draft required investments to be part of "country-owned strategy" in pursuit of a "transformational shift" toward a "low-carbon development path," while the May 15 draft, undoubtedly responding to constituents with more conventional concerns, called for investment plans to be "embedded in nationally-appropriate mitigation actions by the country in the context of sustainable development, taking into account the priorities of economic growth and poverty reduction and increased access to

[8] "A methodology will be developed to take into account direct emissions savings from the project itself, potential emissions savings from replication through demonstration, and the potential for wider emissions savings as a result of policy and regulatory change." (World Bank, 2008).

energy for the country." Further pressure from the climate constituency led to reassertion of low-carbon terminology in the June 3 draft.

One gets the sense that the Bank doesn't know what to do -- and it doesn't want to scare off its donors or clients -- so it is casting as wide a project net as possible. This is unfortunate, because only a well-conceived strategy that goes beyond a projeet-level approach to focus on dynamic programs and technological learning is capable of delivering the mitigation needed to avoid runaway global warming. The June 3 draft alludes to such programs, but only as one of myriad options for financing. I believe the World Bank cannot pursue the critical objectives of the CTF if fails to provide the strategic leadership necessary to make such truly transformative impacts a reality.

**Recommendations for Congress**

The World Bank's most recent (June 3) proposal for the CTF cannot accomplish the fund's mission, because it lacks a focus on cost-competitiveness for renewables; fails to commit to carbon accounting; and leaves open the door to financing coal-fired power projects, even without carbon capture and sequestration (CCS). Fortunately, Congress can intervene: It has enormous leverage because the World Bank's management views the CTF as critical for the institution's future. I believe that Congress can help make the Clean Technology Fund a successful investment of taxpayer dollars by setting the following conditions for authorization.

1. Congress should not agree to provide American taxpayer support for the CTF as it is currently proposed. Instead, Congress should instruct the U.S. Treasury to inform World Bank management that U.S. support will only be forthcoming if the proposal is revised to ensure strategic use of the CTF to make zero-emissions renewable energy cost-competitive with energy from fossil fuels.

2. To do this, the CTF must focus on renewables that have the potential to be cost-competitive within a few years, and exclude projects that merely improve fossil-fuel combustion efficiency. In particular, the CTF should exclude all proposals for coal-fired power.[9]

3. The revised proposal must include a commitment by the World Bank to adopt carbon accounting as rapidly as possible; certainly no later than within a year of CTF authorization and before any funds are actually disbursed. Without carbon accounting, the World Bank cannot select the most cost-effective projects, track progress on emissions reduction, or fulfill the Clean Technology Fund's mandate of helping developing countries bridge the gap between dirty and clean technology.

In closing, U.S. leadership in the creation of a multilateral Clean Technology Fund is laudable, and indeed essential in the global effort to prevent rapid, catastrophic climate change. But a badly-designed fund will be worse than no fund at all, because it will dissipate scarce resources while making it more difficult to set up an effective alternative. The World Bank has the technical staff to produce a well-designed CTF proposal, if the U.S. Congress makes it clear that the American people expect this in exchange for their contribution. However, if the World Bank's management is unable to comply in a timely fashion, then the U.S. should look elsewhere for a more qualified organization to administer this multibillion dollar fund.

[9] Some look to carbon capture and sequestration (CCS) as an alternative to eliminating coal altogether. However, the technical and economic prospects for widespread use of CCS within the coming decade are limited and uncertain. Moreover, because coal with CCS will always cost more than coal without CCS, and given the likelihood of sustained high coal prices over the next decade, technologies such as wind and solar are better bets for a strategically-focused CTF.

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# Global Civil Society Statement on World Bank Climate Investment Funds

June 5, 2008

UN Secretary General Ban Ki Moon has called on all nations to "come together in a global, collective, inclusive and low-carbon approach to growth and development." Public money could and should have a vital and central role to play in encouraging and supporting a global shift to low carbon technologies.

We, the undersigned representatives of development, environment, faith-based, human rights, community, and indigenous rights groups oppose the World Bank's current initiative to establish Climate Investment Funds (CIFs).

While we recognize that efforts have been made to improve the original proposal (e.g. in governance structures), we are simultaneously alarmed that Bank management is offering minimal public comment period, in English only, on an issue of obvious global significance. This kind of disregard for the importance of the input of global civil society is unfortunately typical of the World Bank and illustrative of our concerns regarding the Bank's administration of climate funds. We further note the following concerns:

- ***It is highly inappropriate to issue loans for adaptation, given that rich countries are overwhelmingly responsible for climate change.*** It is currently suggested that the proposed Pilot Program for Climate Resilience will offer loan finance for adaptation, even though the overwhelming responsibility for climate change we experience today lies clearly with rich (World Bank donor) countries.

- ***The World Bank's energy lending patterns must be addressed before it takes control of climate funding.*** Unfortunately, and in sharp contrast to the transformational role that any useful public finance mechanism must play, the World Bank Group continues to commit scarce international development finance in a manner that locks in long-term energy pathways inconsistent with international climate needs. In fact, since the Gleneagles G8 meeting in 2005, where the Bank Group was tasked with designing a clean energy investment framework and leading the fight against climate change, lending for fossil fuels has actually increased at a rate that exceeds the increase in renewable technologies – thus exacerbating an already large imbalance in funding.[1] Meanwhile, on November 29, 2007, the European Parliament overwhelmingly passed a Resolution calling for an end to fossil fuel financing by the European Investment Bank and Export Credit Agencies.

- ***The Clean Technology Fund (CTF) has no definition of clean technology***, and there are serious concerns that it will be oriented heavily toward funding large-scale coal plants[2]. Without a clear definition of "clean technology," the Clean Technology Fund may thus be used to finance projects that do not clearly mitigate climate change or may take up scarce resources that bring minor or incremental change, when fundamental change is

[1] World Bank Group support for fossil fuel extraction in FY06 actually increased 93% compared to FY05. The private sector lending arm of the World Bank Group – the IFC actually increased its support for oil alone by more than 75% from FY 05-06. Current World Bank Group support for fossil fuels, including power, has increased at least 42% over FY05 levels. World Bank support for renewables and efficiency is also increasing but by less than its support for fossil fuels – 28-40% by the Bank's own estimates. So the gap in funding is actually growing larger, and exactly the wrong signals are being sent to the market.

[2] Annex A, p. 14 of the draft "Proposal for a Clean Technology Fund," April 29, 2008, Rev. 1, states: "Financing from the CTF could cover one or more of the following proposed transformational investments:"... "(iii) Achieve significant greenhouse gas reductions by adopting best available coal technologies with substantial improvements in energy efficiency; (iv) Support readiness for implementation of carbon capture and storage"...

needed. Public finance meant to combat climate change should not be used to subsidize any carbon intensive technology, even if they represent a marginal improvement in emissions. *Clean must mean "clean", not "slightly less dirty".* A prime example of this practice is the recent approval of a $450 million loan by the International Finance Corporation (IFC) for a 4000 MW supercritical coal fired power plant.[3]

- ***The governance structure of the World Bank is not sufficiently inclusive of developing country governments.*** While we recognize that improvements to the proposed governance structure of the CIFs have been recently proposed, any such improvements are inadequate when located within an institution that is both undemocratic and lacks transparency. The World Bank, as an institution, is burdened by fundamental issues of trust with the very constituencies that it professes to serve. Therefore, any initiative administered by the Bank will at best have to work very hard to overcome legitimate scepticism, and at worst will be undermined and rendered ineffective by the reputation of its parent.

- ***The World Bank initiative could undermine the United Nations Framework Convention on Climate Change (UNFCCC).*** The proposed funds could divert funding that should come through a global agreement based on the model of common but differentiated responsibilities. The UNFCCC Adaptation Fund that was established at the Conference of Parties in Bali in 2007 has already held its first meeting, and is moving forward. However, it will require additional funding beyond the levy from the Clean Development Mechanism. Additional funds that might have gone to this Adaptation Fund ,could now be diverted into the World Bank.

- ***Clean energy funding for the purposes of addressing climate change in developing countries should be in the form of grants.*** The Bank currently proposes both grants and loans for "clean" energy technologies. At the very least, climate funds should provide grants equal to the difference in price between conventional technologies and truly clean technologies that will help put countries on a clean development path. A policy such as this could do much to "level the playing field" for truly clean renewable technologies.

- ***Funding to help developing countries respond to the challenges of climate change must be explicitly additional*** to the long-standing Overseas Development Assistance (ODA) commitment of 0.7% GDP.

- ***Developing countries have already voiced grave concerns.*** In Bangkok, at the plenary sessions of the UNFCCC's ad hoc working group on long-term cooperation, the G77 and China criticized the World Bank's Climate Investment Funds. Individual developing countries have also expressed alarm that the Bank initiative would undermine their efforts in the UNFCCC.

We believe that urgent action on climate change is required. However, the current rush to establish the CIFs could lead to establishing top-down funds that fail to promote the vital, wider environmental and development benefits and sustainable transformation required to address climate change.

At this delicate moment in history, pushing forward with World Bank-led climate investment funds could lead to a serious erosion of trust in the international community. Therefore:

**We urge developed country governments not to support the launch of the World Bank initiative until and unless all the aforesaid concerns are fundamentally addressed.**

[3] The Tata Mundra Ultra Mega $450 million loan was approved by the IFC's Board on April 8th, 2008. For a critique of the project, please click here.

**We call on developing country governments to give attention to our concerns and raise them with donor countries, the World Bank, and other relevant institutions.**

**Endorsers:**

**Argentina**
Amigos de la Tierra

**Australia**
Friends of the Earth Australia

**Bangladesh**
BanglaPraxis
Community Development Library (CDL)

**Belarus**
IPO "Ecoproject Partnership

**Belgium**
Coalition of the Flemish North-South Movement
Friends of the Earth Flanders & Brussels

**Brazil**
AGAPAN, Associação Gáucha de Proteção ao Ambiente Natural
Esplar - Centro de Pesquisa e Assessoria
Rede Brasil sobre Instituições Financeiras Multilaterais

**Cameroon**
Centre pour l'Environnement et le Développement

**Canada**
KAIROS: Canadian Ecumenical Justice Initiatives

**Denmark**
DanChurchAid
NOAH, Friends of the Earth Denmark

**EU**
CEE Bankwatch Network

**Germany**
GENDERCC - Women for Climate Justice
SÜDWIND e.V.
Urgewald
World Economy, Ecology & Development (WEED)

**Honduras**
Movimiento Madre Tierra Honduras, Member of ATALC
Movimiento Madre Tierra, Friends of the Earth Honduras

**India**
Bharatiya Krishak Samaj (Indian Farmer's Organization)
Indian Society for Sustainable Agriculture and Rural Development

**Indonesia**
Anti Debt Coalition Indonesia (KAU)
Association of Prison Ministries (APM)
Indonesian Foundation of Education and Self-Reliance (YPSI)
INFID (International NGO Forum on Indonesian Development)
Institute for Essential Services Reform (IESR)
Jakarta Christian Communication Forum (FKKJ)
Kalikasan-People's Network for the Environment (Kalikasan-PNE)
Law Enforcement Watch (LEW)
Pantau Foundation- Indonesia
Perhimpunan Solidaritas Buruh (Association of Workers Solidarity)
Wahana Lingkungan Hidup Indonesia
WALHI/Friends of the Earth
INSIST (Yogyakarta)

**International**
ActionAid International
Eco Equity
Friends of the Earth International
Greenpeace International
Jubilee South - Asia/Pacific Movement on Debt and Development
Solidarity Workshop

**Italy**
Coopi Lazio
Fair
Legambiente
Lunaria
Intersos
Tavola della Pace
Terra Nuova
Un Ponte Per
VIDES International
Campagna per la riforma della Banca Mondiale (CRBM)

**Kazakhstan**
BAITEREK

**Kyrgyzstan**
Ecological Movement "BIOM"

**Malaysia**
Friends of the Earth Malaysia
Third World Network

**Nepal**
Least Developed Country Watch
Rural Reconstruction Nepal
South Asia Alliance for Poverty Eradication

**Netherlands**
A SEED
MAID (Management Projects for Individual Empowerment and Democratic Development)
Milieudefensie (FoE)

**Nigeria**
Environmental Rights Action

**Norway**
Friends of the Earth Norway
Norwegian Church Aid (NCA)
SLUG (Norwegian Campaign for Debt Cancellation)

**Papua New Guinea**
Center for Environmental Law & Community Rights Inc. (CELCOR)/Friends of the Earth
The Papua New Guinea Eco-Forestry Forum

**Peru**
ECOVIDA
Instituto Ambientalista Natura

**Philippines**
Center for Environmental Concerns-Inc
Climate Action Network Southeast Asia (CANSEA)
Kalikasan-People's Network for the Environment
NGO Forum on the ADB
Philippine Network on Climate Change (PNCC)
Philippine Rural Reconstruction Movement (PRRM)
The Freedom from Debt Coalition (FDC)

**Portugal**
Quercus-Associação Nacional de Conservação da Natureza

**Romania**
Foundation TERRA Millennium III

**Russia**
Biodiversity Conservation Center
Center for Assistance to Environmental Initiatives
Counterpart for Development Association
Assessment Center ECOM (St. Petersburg)
Society of Naturalists

**Serbia**
Center for Ecology and Sustainable Development (CEKOR)

**Slovakia**
Friends of the Earth-CEPA

**South Africa**
Centre for Civil Society Economic Justice Project
University of KwaZulu-Natal

**South Korea**
KFEM/Friend of the Earth South Korea

**Spain**
Xarxa de l'Observatori del Deute en la Globaltización

**Switzerland**
Alliance Sud

**Tajikistan**
Foundation to Support Civil Initiatives
Youth Ecological Centre of Tajikistan

**Timor Leste**
Haburas Foundation
La'o Hamutuk (Timor Leste Institute of Development Monitoring and Analysis)
Luta Hamutuk Institute
Peace and Conflict Studies

**Togo**
Jeunes Volontaires pour l'Environnement-International

**UK**
Bretton Woods Project
Christian Aid
Down to Earth: the International Campaign for Ecological Justice in Indonesia
Plan B
Platform
The Forest Peoples Programme
The New Economics Foundation

**Ukraine**
Nikolaev Club for Promotion of the Sustainable Development and Civil Society "Joint Action"
Black Sea Women Club
Ecoclub
National Ecological Centre of Ukraine
Ukrainian Children's Union "Ecological Guard"

**USA**
Amazon Watch
Circle the Earth
Crude Accountability
Friends of the Earth US
International Accountability Project
International Forum on Globalization
International Rivers
Jubilee USA Network
Oil Change International
Rainforest Action Network (RAN)
Sustainable Energy and Economy Network (SEEN)



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