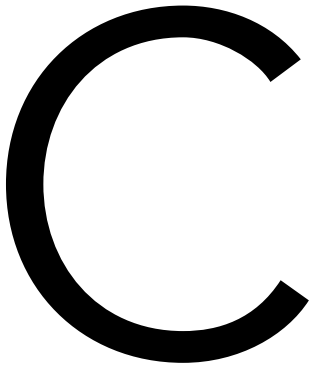
PROTOTYPE **CARBON** FUND

A PUBLIC/PRIVATE PARTNERSHIP

ANNUAL REPORT 2003



CONTENTS

This is the third annual report of the Prototype Carbon Fund, covering the period from October 2002 through September 2003. The audited PCF financial statements for fiscal year 2003 (July 1, 2002 to June 30, 2003) are included. An online version of this report is available on the PCF website: www.prototypecarbonfund.org.

Notes: All $ = U.S. dollars. 1 ton = 1000 kilograms (1 metric tonne). All greenhouse gas emission reductions are measured in tons of carbon dioxide equivalent (tCO_2e). This report is provided for informational purposes only. The PCF is not a legal partnership. No warranties or representations are made as to the accuracy, reliability or completeness of any information herein.

OUR MISSION IS TO PIONEER THE MARKET FOR PROJECT-BASED GREENHOUSE GAS EMISSION REDUCTIONS WITHIN THE FRAMEWORK OF THE KYOTO PROTOCOL, AND TO CONTRIBUTE TO SUSTAINABLE DEVELOPMENT.

CLIMATE

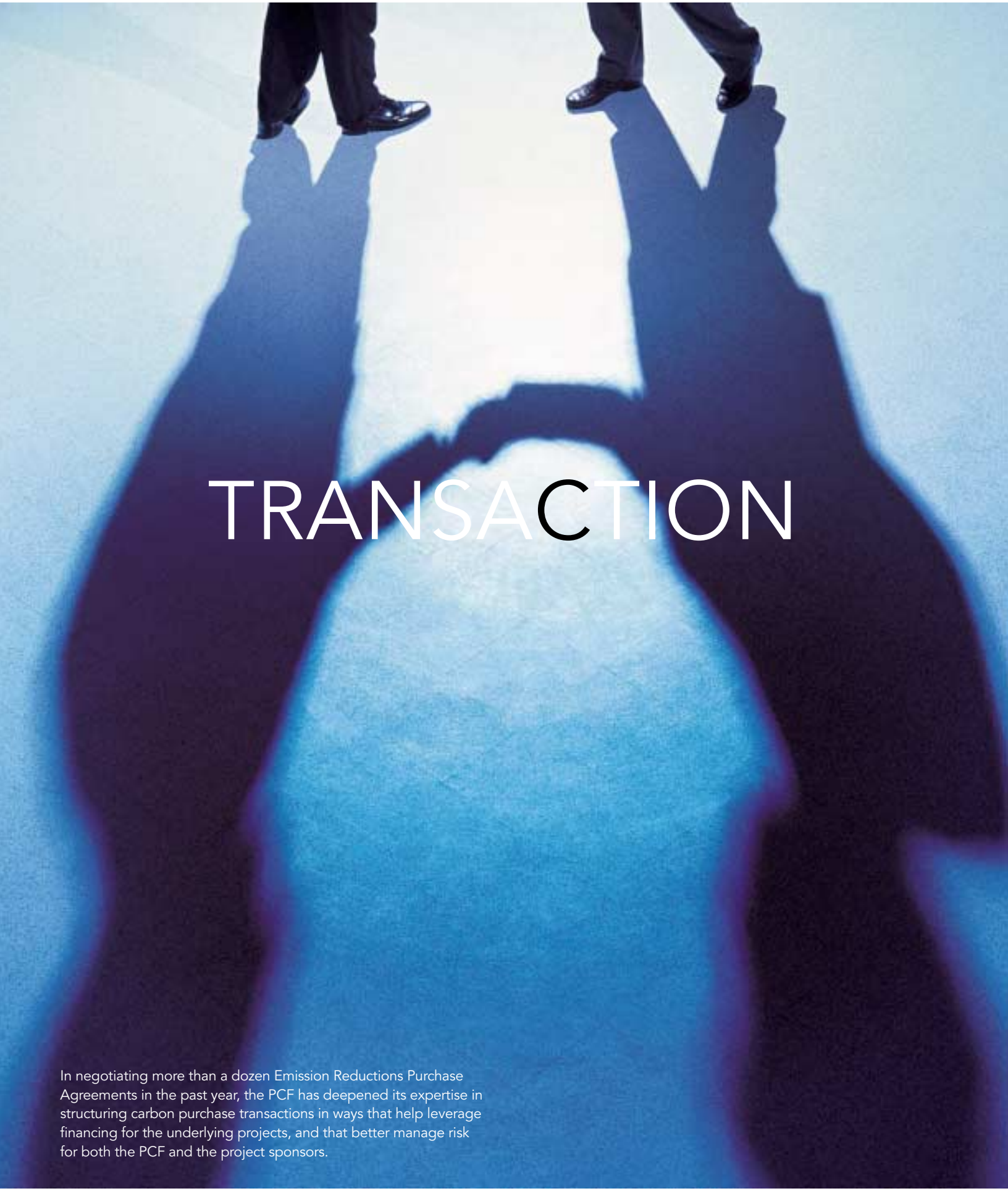
The extreme weather events in Asia, Africa and Europe in the past year have highlighted the importance of stabilizing the level of greenhouse gases in the atmosphere and minimizing future emissions.

REDUCTION

One of the difficult challenges facing the global community is how to cost-effectively reduce greenhouse gas emissions to avert the worst impacts of climate change. The Prototype Carbon Fund is an innovative public/private partnership aimed at mitigating climate change.

In 2003, we have witnessed extreme climate events wreak havoc in both rich and poor countries. The impact of these events has fallen most heavily on the poorest, who are the least able to recover from such shocks.

CHALLENGE



TRANSACTION

In negotiating more than a dozen Emission Reductions Purchase Agreements in the past year, the PCF has deepened its expertise in structuring carbon purchase transactions in ways that help leverage financing for the underlying projects, and that better manage risk for both the PCF and the project sponsors.

TECHNOLOGY

The primary focus of PCF projects is on renewable energy technologies—such as wind, small hydro, and biomass energy technology—that in many cases would not be viable without financial support from the PCF.

At the international level, the Kyoto Protocol commits industrialized countries to reduce their carbon emissions by an average of 5.2% below their 1990 levels in the period 2008-2012.

KYOTO PROTOCOL

The impact of human-induced climate change and climate variability has fallen most heavily on poor and middle income countries and on poor people, who are the least able to recover from such shocks. The World Bank recognizes that integrating climate change within long-term development strategies is central to achieving an environmentally and socially responsible path to economic development and poverty reduction.

The Prototype Carbon Fund (PCF), now in its fourth year of operation, represents one of the more innovative global mechanisms to mobilize public and private resources and support, in favor of the development of a market for greenhouse gas emission reductions. As a public/private partnership, the PCF represents a platform of shared responsibility among governments and companies from rich countries that are committed to sustainable development.

Two new carbon funds have been established to support small projects in poor and middle income countries and deal with the higher transaction costs and risks in pioneering carbon sequestration activities linked to rural development and poverty reduction. The Community Development Carbon Fund will certify benefits to local communities arising from its emission reductions purchase projects. The BioCarbon Fund will contribute to meet the goal of climate change mitigation while helping to reverse land degradation, conserve biodiversity, and improve the livelihoods of local communities. Together they represent a cost-effective and sustainable alternative to meeting the emission mitigation obligations under the Kyoto Protocol.

The PCF has contributed to building a unique repository of knowledge used by developing countries and those interested in investing in the Clean Development Mechanism and Joint Implementation. As a result of increasing demand from client countries, the World Bank has launched the Carbon Finance-Assist Program to help build capacity to attract carbon finance and allow developing countries to participate fully in the Kyoto Protocol.

Integrating these efforts into the Bank's regular operational work will enhance the effectiveness and sustainability of our development efforts.

IAN JOHNSON

Vice President of Environmentally and Socially Sustainable Development, The World Bank

LETTER FROM THE PCF PARTICIPANTS' COMMITTEE CHAIR

"A lack of knowledge is not a valid excuse for a lack of action."

We are at a time in which the global carbon market is characterized by a multitude of uncertainties, such as the pending entry into force of the Kyoto Protocol, the mechanisms of the different markets and the definitions of the commodities traded. Perhaps the most significant uncertainty surrounds carbon market prices. Reflecting these unknowns, many business leaders are still hesitant when asked whether we have reached the *point of no return* on climate change and still question the need for immediate action on climate policy. Hoping to ignore the predicted effects of global warming and the accompanying climate change, they ask: "Can we go back to zero? Is a political U-turn still possible in a situation in which the world economy is suffering badly?"

The participants in the Prototype Carbon Fund do not have the answers to all these questions. That is not what distinguishes them from many others. What does make them different is that they did not hesitate and decided to take action earlier, because they felt that their attitude and commitment would help to motivate others to action and to clarify the political uncertainties. The pioneers of the Prototype Carbon Fund were convinced that a new market involving a totally new commodity first had to be started *in concreto*—before all rules are cast in iron—simply on the basis of theory, concepts, models and scenarios.

But this market needs more than pioneers now. Today, the rules of the game are sufficiently concrete to make the market take off. What we need at this moment is an increasing volume of trades which provide the necessary liquidity for the global carbon market. But let's face reality. There is nothing resembling a rush on emission reductions yet. While the mist over the institutional debate is dissipating, some threats have replaced uncertainty. Administrative intricacies and transaction costs are scaring several early investors, whose success stories are badly needed to reassure others.

Today the PCF's mission is no longer the pioneering of single transactions but finding ways to leverage carbon finance in order to build the global carbon marketplace. As a sign of these changing times, the project portfolio of the Prototype Carbon Fund is almost complete. The aspiration of the Prototype Carbon Fund manager and participants has always been to pave the way for themselves and all the others who would want to follow. The range of projects already submitted to the Kyoto Protocol's Clean Development Mechanism Executive Board is very encouraging on this point.

But in that process it is important that the flexible mechanisms of the Kyoto Protocol remain flexible in order to allow their significant contribution to the long-term climate-change challenge to be effective, while ensuring environmental integrity. That challenge is there for all of us—host countries, governments, businesses and nongovernmental organizations. How we respond will help determine our future. It is in all of our interests to work together.

JEAN CLAUDE STEFFENS
PCF Participants' Committee Chair

LETTER FROM THE HOST COUNTRY COMMITTEE CHAIR

Being a long-standing member of the Host Country Committee has given me a great sense of what the Clean Development Mechanism and Joint Implementation will look like once the Kyoto Protocol enters into force. With my knowledge of the PCF's procedures for project preparation, operation, monitoring and evaluation, I can affirm—with great enthusiasm—that it is possible to achieve high-quality emission reductions through certified project activities and also to fulfill Kyoto Protocol sustainable development requirements. The PCF has made this possible by transforming the rules and procedures of the Marrakesh Accords into environmentally sound CDM/JI projects that reduce greenhouse gases, generate carbon assets and produce relevant social benefits.

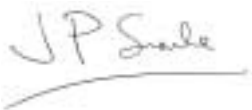
But projects and carbon transactions are not the only outcome of the PCF after its launch three years ago. There is much more. One example is the pioneering work done by the PCF team, which has left the stakeholders in the "carbon community" with relevant information on CDM/JI project cycles, such as the preparation of monitoring and verification protocols, and methods to calculate project baselines. Another example is the involvement of governments and the private sector from industrialized countries, "the Participants" in the governance structure of PCF. By providing guidance and funding, they have helped the PCF to reach the level of today's remarkable achievements: 420 Project Idea Notes, 50 Project Concept Notes, 12 signed Emission Reductions Purchase Agreements, plus capacity-building initiatives grouped under the Carbon Finance-Assist Program (CF-Assist).

Another example of the PCF's success is the involvement of developing countries, "the Host Countries" in its governing body. Since host country project approval is a key step in project development, their level of organization and involvement has been crucial in the development of the PCF's project portfolio. As the opportunity to "learn by doing" in the development of carbon market policies, rules and business processes grows in host countries—in addition to the establishment of adequate institutional arrangements—even more sound projects will be identified and promptly implemented.

This trilogy "the World Bank - PCF Participants - Host Countries" powerfully demonstrates how public/private sector partnerships can mobilize new and additional resources to address global environmental problems through market-based mechanisms, and lower the cost of compliance with the Kyoto Protocol.

The creation of two new carbon funds, the Community Development Carbon Fund (CDCF) and the BioCarbon Fund, needs to be highlighted too, since they will enrich the PCF experience by covering other project areas such as afforestation, reforestation and agriculture. Through them, small-scale projects will be feasible in poorer countries and windows for carbon sequestration projects other than those of the Kyoto Protocol for the first commitment period will be explored. Host countries welcome these new initiatives and recognize the PCF as the first program to facilitate capacity building and funding for certified project activities, in response to the needs expressed by these countries during the past six years of climate negotiations. Yet, there is a lot to be done, especially as more developing countries become part of the PCF process.

Let me finish by saying that the host countries are looking forward to the full implementation of the BioCarbon Fund, the CDCF and CF-Assist. In doing so, we will work under the framework of the Host Country Committee in order to facilitate appropriate collaborative channels to strengthen this public/private partnership developed by The World Bank.



JUAN PEDRO SEARLE

Chair of the Host Country Committee

About this Report

As the PCF enters its fourth and final year of its placement phase—the phase in which it contracts the purchase of emission reductions—there is an impressive amount of activity "on the ground" in terms of power plants and waste management systems being built and operated, all with the support of carbon finance. Just how carbon finance supported this activity, and what it means for the many stakeholders in the PCF's operations can now be told, as projects move into implementation.

As well, by its fourth year, the PCF's management has committed and expended substantial Fund resources in line with the principal terms of the Fund and ongoing guidance of its participants and host countries. There is now much to report on the way in which Fund resources have been used to meet portfolio development and project selection criteria and achieve the required volume of emission reductions cost-effectively.

You will therefore find in the PCF's Annual Report 2003: audited financial statements, performance of Fund Management in containing costs within approved budgets, volume and average cost of the assets contracted, and the success of Fund management in containing non-project costs in Fund implementation, while contracting for delivery of greenhouse gas emission reductions that may serve the participants' needs for cost-effective emission reductions.

Likewise, the Prototype Carbon Fund's operational experience is now so deep that participants, project sponsors and host countries alike can more precisely define how the PCF has met their needs and how they see its role in the emerging global carbon market.

So this report is different from previous PCF annual reports; it is comprised of two parts:

- One documents the PCF's results, covering financials, expected delivery of emission reductions by mechanism and the Fund's contribution to market development through contributing methods for achieving emission reductions and knowledge dissemination.

- The other part of this annual report gives the perspective of key stakeholder groups. This includes PCF Participants that have made the PCF possible, as well as host country representatives and project level stakeholders. A sampling of projects from the PCF's unique portfolio is seen through the eyes of this partnership.

Using design tools, the components of this annual report are readily distinguishable and separable, allowing individual participants to extract the PCF's results.

KEN NEWCOMBE

PCF Fund Manager, Senior Manager Carbon Finance Business, The World Bank

HIGHLIGHTS OF 2003

Because it is the first global carbon fund, every year in the life of the PCF brings rich experience, insight and learning. Notable achievements in the third full year of PCF performance that have helped us learn by doing include:

- With the recent approval of the Czech Republic Host Country Agreement and authorization to sign the two outstanding Czech Emission Reductions Purchase Agreements (ERPAs), the number of signed and authorized ERPAs will have doubled from 7 to 14 in 2003—roughly half of the expected final number of projects in the PCF portfolio;

- Compared to zero agreements signed in 2002 in the Joint Implementation market, 2003 saw major breakthroughs with the signing of Host Country Agreements with Bulgaria, Romania and the Czech Republic. Added to this, the agreement on October 6th 2003, of the Polish Council of Ministers authorizing the signing of the Poland Host Country Agreement, and the accomplishment of bringing the Hungary Pannongreen project to ERPA signature from identification in just six months, signal major progress in the PCF's Joint Implementation asset creation.

- In 2003, the PCF filled the East Asia gap in its portfolio with the inclusion of major assets in Indonesia, the Philippines and Vietnam, as well as by reaching a watershed agreement with the government of China on the basic terms of purchase for several major Clean Development Mechanism assets.

- Breakthroughs in East Asia and new projects in South Asia mark the end of the identification phase for PCF projects. All the projects that could be part of the PCF's final portfolio of about US$160 million in emission reductions purchases are now known and are working their way through due diligence and negotiations.

- In June 2003, the Chile Chacabuquito Project, a 26-megawatt run-of-river hydropower project, became the first PCF project, and possibly the first CDM project, to achieve verified emission reductions following guidance from the Marrakesh Accords. The independent verifier, TÜV Süddeutschland of Germany, verified that the project had achieved 112,000 tons of carbon dioxide emission reductions after almost one year of operation.

- 2003 marked the beginning of CDM Executive Board review of methodologies to determine additionality under the guidance of the Marrakesh Accords. The World Bank submitted eight new methodologies by mid-September 2003. The CDM Executive Board has already approved two of those submitted by the World Bank. In addition, the Bank submitted for validation the first CDM projects applying the new streamlined procedures for small-scale projects—the Mexico INELEC run-of-river hydropower projects. Altogether these cover about half of the PCF's CDM portfolio.

- The PCF's commitment to disseminating its unique knowledge to host countries and other stakeholders was handsomely demonstrated in 2003 with a trebling of delivered person-training days in carbon finance from about 800 in 2002 to over 2400 in 2003.

COMMITMENT

Six governments and 17 companies—including power and oil companies from Japan and Europe, and leading global banks—all from industrialized countries, are contributing US$180 million in funds to the PCF, which to date has projects with an emission reduction potential of more than US$120 million under preparation.

STAKEHOLDERS IN A SHARED VISION

THE PROTOTYPE CARBON FUND

Now in its fourth year, the Prototype Carbon Fund is part of a larger global effort to combat climate change. The carbon finance business has taken on a new sense of urgency in the face of mounting evidence that the Earth's climate is changing, which could have dire consequences for major parts of humanity. The main culprits are a series of gases—called greenhouse gases—emitted by fossil fuels, waste, or agricultural processes that contribute to the trapping of heat in the Earth's atmosphere by creating an invisible blanket around the planet.

THE GLOBAL CONTEXT

In June 1992, over 180 countries at the "Earth Summit" in Rio de Janeiro adopted the United Nations Convention on Climate Change (UNFCCC), a legal framework that commits Parties to the Convention to start the process of stabilizing climate-altering greenhouse gases in the atmosphere. The Kyoto Protocol, which was adopted under the UNFCCC, commits industrialized countries to reduce their carbon emissions by an average of 5.2 percent below their 1990 levels in the period 2008-2012.

Two of the flexible mechanisms incorporated in the Protocol—the Clean Development Mechanism in developing countries, and Joint Implementation in countries with economies in transition—enable industrialized countries to meet some of their obligations beyond their own borders through projects generating greenhouse gas emission reductions. As the global climate system benefits from reductions in greenhouse gas emissions wherever they occur, the Clean Development Mechanism and Joint Implementation will make the costs of reaching emission reduction targets cheaper, plus contribute to sustainable development through the projects.

Companies can supplement their commitments at home by purchasing potentially lower-cost emission reductions in developing countries and countries with economies in transition. As a result, projects in these countries will get a new source of financing for sustainable development in the energy, industrial and waste management sectors, land rehabilitation, and in the introduction of clean and renewable technologies. Industrialized countries can meet part of their Kyoto obligation, while the threat of climate change is reduced at a lower overall cost.

The PCF was created as a response to the need to understand and test the procedures for creating a market in project-based emission reductions under the Kyoto Protocol's flexible mechanisms. The PCF has played a pioneering role in developing the market for greenhouse gas emission reductions, while promoting sustainable development, and offering a learning by doing opportunity to its stakeholders.

The PCF uses funds made available by its 23 participants—6 governments and 17 companies—in projects that will produce high quality greenhouse gas emission reductions, which PCF Participants can use in compliance with their expected emission reduction obligations. The primary focus of the projects is on renewable energy technologies—such as wind, small hydro, and biomass energy technology—that would in many cases not be financially viable without financial support from the PCF.

IN THE SPIRIT OF THE WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT (WSSD)

The PCF pre-dated the World Summit on Sustainable Development held in Johannesburg in September 2002, but has captured the spirit and intent of the Summit with its emphasis on partnerships for sustainable development. The broad range of actors that cooperate and play an active role in the success of the operations of the PCF, ranging from public and private participants to host country officials, from private entities in host countries, to private verifiers and non governmental organizations, are crucial to the PCF's success.

The WSSD was different from other United Nations Summits in that it strongly encouraged partnerships for sustainable development within its formal process, and highlighted such partnerships as an important outcome of the Summit. The Plan of Implementation adopted by the over 190 governments represented at the WSSD, urges actions to improve access to environmentally sound energy services and resources, and to accelerate increased access of the poor to reliable, affordable, environmentally sound energy services as a means to improve standards of living. The PCF is one of the most innovative and pioneering public/private efforts—and one a bit ahead of its time—aimed at mobilizing funds to combat climate change.

Through the PCF, all of its stakeholders have made the step from debate to action. It has created a learning network which tries to implement the political agreements reached in Kyoto, Bonn and Marrakesh. It translates international obligations into Emission Reductions Purchase Agreements, and has demonstrated how partnership and shared interest among all participating parties can foster cooperation between private and public sectors—North and South—and can help to implement successful emissions reducing projects.

" We appreciate and are motivated by the efforts of the PCF, which has a head start on the Kyoto Protocol application. The PCF provides its participants and host countries with qualified expertise and with opportunities to join in activities towards building a sustainable society."

KYUSHU ELECTRIC POWER COMPANY

PCF Participant

WHO IS THE PCF?

A PARTNERSHIP OF STAKEHOLDERS IN A SHARED VISION

GOVERNMENT OF CANADA

The Canadian International Development Agency and Canada's Clean Development Mechanism & Joint Implementation Office, housed at the Department of Foreign Affairs and International Trade, have represented Canada in the PCF since its inception in 2000.

In an effort to cooperate with other nations, Canada ratified the Kyoto Protocol in December 2002. In the February 2003 budget, CDN$2 billion was dedicated to implementing the Climate Change Plan for Canada, which builds on more than CDN$1.7 billion already committed to climate change programs, showing Canada's commitment to participation in the international process. In addition to the contribution to the PCF, the Canadian government has allocated CDN$25 million over five years to establish Canada's Clean Development Mechanism & Joint Implementation Office, as well as CDN$100 million to the Canada Climate Change Development Fund. About CDN$25 million of the latter is supporting projects addressing Clean Development Mechanism capacity building in developing countries.

The experience with the PCF has fostered Canada's commitment to continue its participation via the new World Bank funds, namely the Community Development Carbon Fund and the BioCarbon Fund.*

GOVERNMENT OF FINLAND

The Finnish government regards the Kyoto Protocol as a landmark agreement among the international efforts to tackle global environmental challenges. Joint Implementation (JI) and the Clean Development Mechanism (CDM) are essential parts in the implementation of the Protocol. Although Finland aims to reach its Kyoto target through domestic measures, CDM and JI could play an important role in future commitment periods.

Finland has established a CDM/JI Pilot Program to test the mechanisms and create the capacity to utilize these mechanisms in the future. The Program has a budget of €22 million. PCF accounts for about half of this budget. The rest of the budget will be used to buy Emission Reduction Units/Certified Emission Reductions from about ten projects bilaterally. Through the Pilot Program, Finland expects to cover 3-4% of its reduction target.*

JAPAN BANK FOR INTERNATIONAL COOPERATION

The Japan Bank for International Cooperation (JBIC) is a governmental financial institution that implements Japan's external economic policy and economic cooperation, with US$192.3 billion in outstanding loans and an overseas network of 26 representative offices worldwide.

JBIC has been very active for more than 10 years in addressing global environment issues, and in providing projects that contribute to alleviation of greenhouse gas effects. In line with these past efforts, the Japan Bank for International Cooperation participated in the PCF along with Japanese private companies in order to become engaged in the proper promotion of flexible mechanisms under the Kyoto Protocol. Involved actively as a member of the Participants' Committee, the Japan Bank for International Cooperation highly commends the PCF Fund Management Unit for the accumulation of know-how in formulating concrete Clean Development Mechanism and Joint Implementation projects. JBIC also intends to utilize the experience and knowledge obtained through participation in the PCF, along with our extensive network in dealing with developing countries.*

Ministerie van Economische

GOVERNMENT OF THE NETHERLANDS

The Dutch government is very committed to tackling the problem of global warming. The government decided to use the Joint Implementation and Clean Development Mechanism instruments to reach 50% of its Kyoto target of 6% in the periods from 1990 to 2008 and 2012. This target equals 100 million tons of carbon dioxide equivalent. The Dutch government implements projects by means of the Dutch Joint Implementation ERUPT tenders and the Clean Development Mechanism Purchase Program.

The Ministry of Economic Affairs, the representative of the Dutch government in the PCF, finds it of utmost importance that carbon dioxide emissions get a price on an international market, because it would allow us to use market mechanisms to tackle an environmental problem in a cost-effective way. The PCF and the Dutch government are working hard on the prompt start of CDM. Of course, as people eager to contribute to a solution for climate problems we are evidently facing, we are disappointed by the fact that the Kyoto Protocol is not yet in force and as a result, we are not yet able to register our projects. We hope the years 2003 and 2004 will bring a breakthrough in all these areas.*

GOVERNMENT OF NORWAY

In 1996, following the creation of the pilot phase on Activities Implemented Jointly (AIJ) at the first Conference of the Parties to the UNFCCC, ie COP-1 in Berlin, Norway supported the creation of an AIJ program at the World Bank. The objectives of the program were to extend and diversify the AIJ transactional experience by creating new partnerships and implementing a range of project types. The program emphasized learning, client-country engagement, methodological development, private sector participation and the identification and selection of projects. Three AIJ projects—in Poland, Mexico and Burkina Faso—were implemented through the program, and methodologies for baselines and for monitoring and verification were developed for these projects. These experiences directly influenced the development of the carbon funds in the Bank, and the participation of Norway in the PCF.*

GOVERNMENT OF SWEDEN

Sweden strives to be a forerunner in global cooperation to curb climate change. Its domestic emissions are low compared to most other industrialized countries—with a reduction of emissions by almost 50% since the 1970s. International cooperation, cost efficiency and fairness are core elements in Swedish climate policy. Even before the first Conference of the Parties to the Kyoto Protocol, Sweden decided to launch a program for Joint Implementation projects in the Baltic Sea region. Sweden has made great efforts to ensure that the Kyoto Mechanisms evolve into efficient, reliable and fair tools for international cooperation in the field of climate-change mitigation. Sweden joined the PCF with a view to influence the policy of the Fund towards high-quality projects, interesting methodological challenges, and a just geographical distribution of projects. Our conviction that rules and guidelines must reflect high standards of environmental integrity, as well as practical experience, is also reflected in our participation in the PCF.*

PCF PORTFOLIO STATUS: EMISSION REDUCTIONS PURCHASE AGREEMENTS (ERPAs) SIGNED

(as of September 15, 2003)

Country/Project Name	Project Description	PCF Contract in million US$	PCF ERPA Emission Reductions tCO_2e	Total Project Emission Reductions Generation tCO_2e
BRAZIL: Plantar Sequestration and Biomass Use	Charcoal produced from sustainably harvested plantation replacing coke for pig iron manufacture	5.30	1,514,286	1,0252,151
BULGARIA: Svilosa Biomass	Biomass-based boiler to utilize wood waste produced at the Svilosa pulp and cellulose plant to replace coal	1.75	500,000	1,007,723
CHILE: Chacabuquito Small Hydro	Run-of-river hydro to replace coal or gas in the grid	6.69	1,750,000	2,520,000
COLOMBIA: Jepirachi Wind Farm	Wind farm in the northern part of Colombia to displace a mix of coal- and gas-based power generation	3.20	800,000	1,168,000
COSTA RICA: Chorotega Wind Farm	Wind farm to displace thermal power capacity addition	0.92	262,660	328,350
COSTA RICA: Cote Small Hydro	Small hydro to replace thermal power generation	0.60	172,110	215,138
CZECH REPUBLIC: CEA Energy Efficiency	Energy efficiency measures and renewables through the Czech Energy Agency (CEA)	2.00	500,000	500,000
GUATEMALA: El Canada Small Hydro	Peaking run-of-river hydroelectric plant in the west coast of Guatemala to displace thermal power plants	7.50	2,000,000	3,887,520
HUNGARY: Pannongreen Pécs Heat and Power Project	Conversion of Pécs Power plant's existing coal-fired boilers to biomass.	5.01	1,193,000	2,645,500
LATVIA: Liepaja Solid Waste Management	Methane capture from waste management and carbon dioxide reduction from power generation	2.48	387,933	864,600
ROMANIA: Afforestation	Afforestation of public land	3.08	854,985	1,594,437
UGANDA: West Nile Electrification Project	Two small hydro power plants to replace a number of diesel generator sets in the West Nile region	3.90	1,300,000	2,736,000

PCF PORTFOLIO STATUS: PROJECTS UNDER PREPARATION

(as of September 15, 2003)

Country/Project Name	Project Description	PCF Contract in million US$	PCF ERPA Emission Reductions tCO_2e	Total Project Emission Reductions Generation tCO_2e
BULGARIA: District Heating	District heating system upgrades for the cities of Sofia and Pernik	6.00	1,500,000	2,961,458
CHINA: Coal-bed Methane	Capture of coal mine methane associated with coal mining operation and utilization of methane for power generation thereby displacing coal thermal generation	12.75	3,000,000	29,000,000
CHINA: Run-of-river Hydro	Run-of-river hydro project to displace coal thermal power generation	8.50	2,000,000	3,706,600
COSTA RICA: Vara Blanca Wind Farm	9.6 megawatt wind farm to displace thermal power generating units in the provinces of Heredia and Alajuela	1.00	284,660	355,825
CZECH REPUBLIC: SEF Energy Efficiency	Energy efficiency measures and renewables through the State Environmental Fund (SEF)	0.72	180,000	180,000
INDIA: Municipal Solid Wastes (ABIL)	Emission reductions from avoiding methane emissions from treatment of municipal solid waste and generation of electricity in Lucknow	5.63	1,500,000	3,624,057
INDIA: Off-season Bagasse Cogeneration (TASL)	Off-season substitution of lignite by biomass fuel in four existing and proposed sugar-cogeneration plants	12.00	4,000,000	7,337,435
INDONESIA: INDOCEMENT Sustainable Cement Production	Emission reductions through energy efficiency measures and alternative fuels for cement production and by creating a blended cement product line	15.00	5,000,000	11,000,000
MEXICO: INELEC 3 Hydros	Hydro plants at three sites: Trojes, El Gallo, and Chilatán	3.63	1,036,050	3,040,464
MEXICO: INELEC Benito Juárez Hydro	15 megawatt capacity hydro plants in Benito Juárez	1.00	285,383	856,149
MEXICO: Cruz Azul Wind Project - Phase I	51 megawatt wind farm located in the state of Oaxaca	7.50	2,000,000	2,240,000
MOLDOVA: Soil Conservation	Afforestation of degraded and eroded state-owned and communal agricultural lands throughout Moldova	5.10	1,455,744	1,775,298
PHILIPPINES: Cogeneration	Bagasse cogeneration plants to supply the heat and power needs of milling companies and to export power to the local grid displacing diesel power generation	7.50	2,000,000	2,499,998
SOUTH AFRICA: Durban Landfill Gas to Energy	Landfill gas recovery and production of electricity from landfill-collected methane	15.01	3,800,000	8,780,034
UZBEKISTAN: Andijan Heating	District heating system replacement and upgrade in the city of Andijan	0.63	210,000	1,070,000
UZBEKISTAN: Tashkent Heating	District heating system replacement and upgrade in the city of Tashkent	7.00	2,000,000	3,135,000
VIETNAM: Grontmij Landfill in Ho Chi Minh City	Landfill gas capture from the landfill in Ho Chi Minh City	8.75	2,500,000	2,932,600

NOTE: NOT ALL PROJECTS UNDER PREPARATION ARE REPORTED

BRITISH PETROLEUM

British Petroleum (BP) is a major global integrated energy company. BP has a strong commitment to the global reduction of greenhouse gases.

Participating in the PCF has provided a good business perspective which runs in parallel with BP's stated goals to achieve sustainable development and behave with social and corporate responsibility. The PCF provides a strong framework in the development of and direction for the global carbon market—leading in the knowledge and experience of the CDM process.*

CHUBU ELECTRIC POWER CO. INC.

Chubu Electric Power Co. Inc. (Chubu Electric) supplies electricity to the Chubu region of central Japan, where manufacturing accounts for about 15% of the national GDP, with a population of 16.6 million people.

In the energy industry, the Company believes that there is no sustainable development for an enterprise if it does not work in harmony with the global environment. This is why we have included activities for environmental protection among our top priorities and are working in a variety of fields. Climate change in particular, is a complex global, long-term problem and this requires us to coordinate not only with our partners in Japan but also with those overseas.

The PCF has promoted well-designed Clean Development Mechanism and Joint Implementation projects for the sustainable development of host countries, and has played a leading role in the design of the Kyoto Mechanisms. Chubu Electric joined the PCF at its founding and has committed US$10 million—among the largest contributions from a private sector participant.*

THE CHUGOKU ELECTRIC POWER CO. INC.

Since its establishment in 1951, the Chugoku Electric Power Co. Inc., has developed its businesses on the basis of its fundamental mission of providing a stable supply of high-quality electricity at affordable rates. Our service area, the Chugoku region in western Japan, covers about 32,000 square kilometers, and has a population of around 7.8 million. The area has an annual gross domestic product of approximately US$260 billion, making it comparable to the economy of Switzerland or Belgium.

One of the top management priorities of our company is that of taking action on environmental issues. In 1993, we adopted the Chugoku Electric Environmental Action Plan, and are actively engaged in environmental issues. To prevent global warming, we are taking various measures including promotion of nuclear power generation and expanded use of new forms of energy. Participation in the PCF, the world's pioneer in the field of carbon markets, is also one of our measures to address the global warming issue. Through participation in the PCF, we expect that not only will we obtain emission reductions to assist us in meeting our voluntary target, but also that we can contribute to sustainable development and expand our knowledge of the global carbon market.*

DEUTSCHE BANK

Deutsche Bank, one the world's largest financial services groups, contains the Global Commodities Group, which is a leading provider of risk management strategies across a range of products and sectors including oil, petroleum, gas, electricity, weather and base and precious metals.

In recognition of the environmental and economic implications of climate change, Deutsche Bank is establishing a portfolio of services to assist its clients to deal with the changing policy and economic conditions that the ratification of the Kyoto Protocol and other climate change legislation will generate. These services include helping clients identify their liabilities under national and international climate change legislation, developing innovative hedging mechanisms to reduce risk, and providing structured finance to maximize projects' viability and environmental value. For example, in the first quarter of 2004, Deutsche Bank will launch an emissions trading desk based in London as part of the Global Commodities Group.

Deutsche Bank strongly endorses the approach and methodology undertaken by the PCF. Its objective of learning by doing has been extremely instructive.*

ELECTRABEL

Electrabel is one of Europe's front-runners in the energy sector and leader in the Benelux electricity market. Electrabel provides comprehensive and tailor-made energy for industrial enterprises, making the most of the synergy between electricity and natural gas. It also offers services to small businesses and residential customers. In 2002, Electrabel's sales outside Belgium (its historical base country) represented more than one third of the total volume (excluding trading).

Climate change is one of the most important challenges Electrabel will have to face in the future. But response to climate change is much more than complying with the new European Emissions Trading System that will come into force at the beginning of 2005. We have to look for innovative ways to protect our business future in view of the emerging carbon-constrained economy. Scenarios and models alone will not be able to define more than the rough processes of the new market. The PCF appealed to us because we realized the climate change challenge cannot be solved in industrialized countries alone. In this context, projects appear as a positive combination of sustainable progress in the host countries, technology transfer and cooperative development.*

FORTUM

Fortum is a leading energy company in the Nordic countries and the other parts of the Baltic Rim. Fortum's activities cover the generation, distribution and sale of electricity and heat, the production, refining and marketing of oil, the operation and maintenance of power plants and energy-related services. The main products are electricity, heat and steam, traffic fuels and heating oils. Fortum's ambition is to provide safe and environmentally benign energy products and services, which contribute to a more sustainable use of resources.

The climate issue is the number one environmental challenge of the energy industry in the foreseeable future. Fortum launched a Climate Initiative at the beginning of 2000, which included projects to increase the share of bio-components in traffic fuels and heating fuels. A pilot facility has produced liquefied wood fuel since spring 2002. In autumn 2002 we introduced a bio-gasoline with an ethanol component to the Finnish market. In our electricity and heat production we aim at favouring renewable energy sources, currently focusing on enhancement of hydro power and increasing use of biomass. 84% of our electricity procurement in 2002—in our own and partly owned power plants—took place without carbon dioxide emissions. The cooperation with the World Bank started in 1997 in the early design phase of the PCF.*

GAZ DE FRANCE

Gaz de France is one of the leading European gas groups and is active throughout the world in exploration and production, natural gas trading, transmission, storage, distribution, energy management and air conditioning and heating. Gaz de France has 14 million customers, 38,000 employees, €14,546 million in consolidated net sales, €3.65 billion in investments, 640 billion kilowatt hours of natural gas carried (via pipelines and liquid natural gas facilities), 9.8 billion cubic meters of natural gas stored in 14 storage facilities, and 31,000 kilometers of transmission systems. Its greenhouse gas emissions today are close to 3 million tons of carbon dioxide equivalent.

Gaz de France is actively looking at sustainable development issues such as reserves impoverishment, promotion of energy efficiency and climate change. We were engaged in action early on global warming—both internally and externally—including research on more efficient and cleaner systems, including major experimentation programs on fuel cells. We are also France's leader in district heating networks using geothermal power. We have invested heavily in fostering the development of clean public transport using natural gas—30 cities have switched to natural gas vehicles. Last July, Gaz de France made a voluntary commitment in France to reduce the greenhouse gas emissions of its transport and distribution pipeline systems by 10% between 1990 and 2007. It is also involved in a research program in the Netherlands for carbon dioxide sequestration in production fields.*

KYUSHU ELECTRIC POWER CO. INC.

Kyushu Electric Power is a power utility where business covers a wide range of services, from power supply to telecommunications. The company is situated in the Kyushu region, the most southwestern of Japan's four main islands. With an area of 4.2 million hectares, the region is home to approximately 13 million people, with an economic scale of US$377 billion. Taking advantage of its close proximity to the Asian continent, Kyushu has long served as a hub of cultural and technical exchanges between Asian and European countries, and Japan. Kyushu Electric Power Company was founded in 1951. Its capital is 237.3 billion yen, with power sales of 76.6 billion kilowatt hours. It employs 14,000 people.

Kyushu Electric is taking the best possible measures for environmental conservation, while satisfying power requirements. As measures against global warming, the company actively promotes the use of nuclear power and renewable energy, as well as improvements in the efficiency of power stations.

Kyushu Electric is endeavoring to utilize its accumulated know-how and technologies on the reduction of greenhouse gases in activities to prevent global warming. As a part of such efforts, the company participated in the World Bank's PCF upon its establishment in 2000, and agreed to contribute US$8 million.*

MITSUBISHI CORPORATION

Mitsubishi Corporation (MC) is one of the world's most diverse enterprises as manifested in the expertise of its six varied business groups—New Business Initiative, Energy, Metals, Machinery, Chemicals and Living Essentials. We have many subsidiaries and affiliates and a network of offices around the world. After many years experience conducting international business, MC today is much more than just a trading company. Our business groups work closely with clients to develop a multitude of commercial opportunities, from product marketing to distribution, project coordination, sourcing of raw materials, capital investment and development of sales channels.

To prevent global warming, Mitsubishi Corporation's participation in the PCF contributes to building a safety net on a worldwide scale, on the climate change issue. We also acquire emission credits and operational know-how through this unprecedented initiative.*

MITSUI & CO., LTD.

Mitsui is one of Japan's leading general trading companies, or *sogo shosha*. In response to worldwide efforts to find solutions to the problem of global warming, Mitsui is undertaking such commerce-oriented approaches as compliance with international tradable emissions programs, participation in brokerage of carbon credits through investment in broker CO2e.com, LLC, and promotion of afforestation businesses and alternative energy sources.

Mitsui is a participant in the PCF established by the World Bank, having made a commitment to invest US$6 million. The Fund is an ambitious endeavor to seek out new, economically optimized methods of solving the twenty-first century's greatest environmental challenge. It plays a capacity-building role that demonstrates that the Kyoto Protocol is workable through the Kyoto Mechanisms, composed of the Clean Development Mechanism, Joint Implementation, and emissions trading. These activities contribute to fostering a global carbon market, climate-change mitigation and sustainable development.*

NORSK HYDRO

Norsk Hydro manufactures aluminum, fertilizers, petrochemicals and has activities in the oil, gas and electricity sectors. We are at present in more than 60 countries; almost 80% of our turnover of approximately US$22 billion in 2002 was related to business in Europe. Norsk Hydro's annual emissions of greenhouse gases amount to approximately 27 million tons of carbon dioxide equivalent, of which a substantial part relates to emission of nitrous oxide from our fertilizer business. Perfluorocarbon gases are a result of our aluminum activity, in addition to carbon dioxide emissions.

Norsk Hydro is aware of future regulation of greenhouse gases and the implications these regulations may have on our business activities. Our investment in PCF is an important element in our buildup of knowledge and position, as we prepare for the emissions trading system emerging within the European Union. Participation in the PCF is also expected to result in cost savings for Hydro. We know that the marginal abatement costs of achieving greenhouse gas reductions in OECD countries are projected to be significantly higher in the future than the costs in developing countries and countries with economies in transition. Therefore, PCF projects are expected to be undertaken exclusively in the latter groups of countries, with resulting cost savings. And finally, our participation in the PCF meets with our goals of being environmentally and socially responsible.*

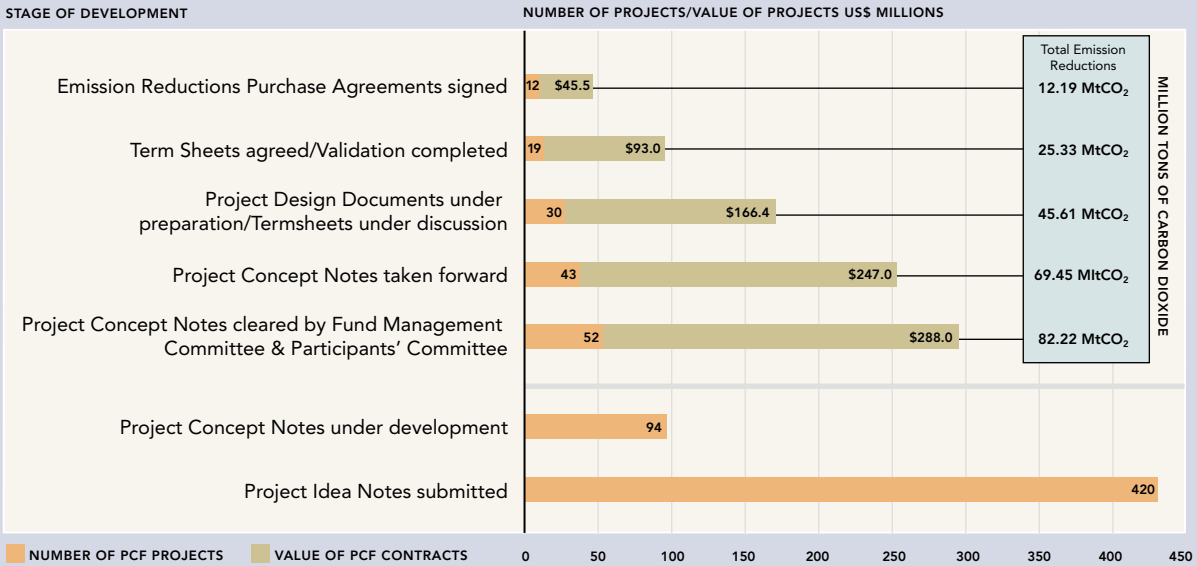
Portfolio Development

A portfolio development strategy which proposed achieving a 3:2 ratio between renewable energy and energy efficiency in the PCF portfolio was agreed by the participants in April 2000. In February 2001, the PCF decided it would seek a 3:2 ratio between CDM and JI projects in the portfolio. It is now anticipated that the PCF portfolio will consist of about 30-35 projects.

Three years into the placement phase, the PCF has reviewed more than 420 project proposals (Figure II.A). Of these, 52 projects have been presented to the PCF Participants' Committee and have received its approval. The PCF is actively developing 43 of these projects—the proposed emission reduction purchase value of these projects totals about US$247 million. With the exception of a few projects in South and Southeast Asia, the process of identification of the projects for the placement phase of PCF is almost complete and the final portfolio of 30-35 projects will be drawn from the projects listed in PCF Performance 2003 pg.16.I. With the placement phase coming to an end by June 2004, new projects will now only be considered if they are of exceptional quality and have significant benefits for the PCF portfolio. In the fiscal year 2004, the PCF will apply an increased flexibility with regard to the geographic distribution of projects, to enable the PCF to bring the placement of funds to a close with an optimal level of asset cost, delivery risk and quality. Recognizing that the availability of resources in the PCF is unlikely to meet the needs of all the projects being developed, the challenge of the next year will be to manage expectations among, and relations with, project sponsors.

STATUS OF THE PROJECT DEVELOPMENT IN THE PCF

Fig. II.A



TECHNOLOGICAL DISTRIBUTION:

ACTIVE PCF PIPELINE PROJECTS – TOTAL OF APPROX. US $247 MILLION

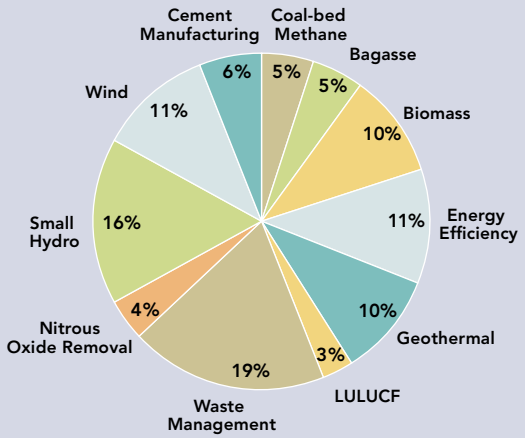


Fig. II.B

REGIONAL DISTRIBUTION:

ACTIVE PCF PIPELINE PROJECTS – TOTAL OF APPROX. US $247 MILLION

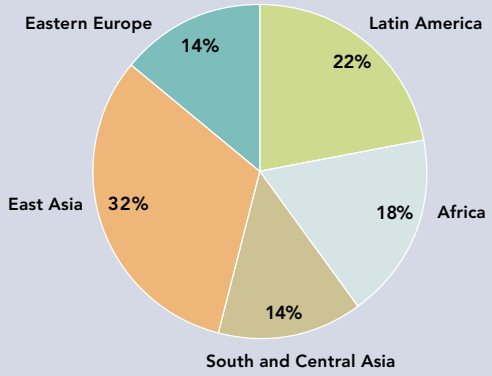


Fig. II.C

Technological diversity has been a design parameter for the PCF portfolio. As is demonstrated in Figure II.B, the PCF portfolio is diverse and covers a wide range of technology and applications. As intended, renewable energy technologies dominate the portfolio pipeline. Including geothermal and bagasse cogeneration projects involving efficiency upgrades, over 30% of the portfolio will consist of energy efficiency projects.

Geographic diversity of the projects from which the final PCF portfolio will emerge is presented in Figure II.C. While project pipeline development moved rapidly in the Latin America region in the early years of the placement phase of the PCF, a balance is beginning to emerge among the regions. Outreach and consultation with countries in South and East Asia began to show results in late 2002, particularly in India, Indonesia and Vietnam. Continued outreach in the East Asia region has resulted in further development of projects in China and the Philippines. Consistent with the expressed preference of the PCF Participants, the East Asia pipeline of potential projects has become very strong and is dominated by a few projects with large volumes of emission reductions. As a consequence, East Asia now accounts for about one-third of the total amount of about US$247 million of potential emission reduction purchases from projects under preparation in the PCF portfolio (Figure II.C). While the pipeline of projects has grown in East Asia, the Eastern European region involving Joint Implementation projects has not developed as quickly as anticipated.

Project pipeline development in the Eastern European region has been constrained due to the uncertainty created by the proposed European emissions trading scheme, the effects of accession to the European Union, the uncertainty of governments as to the most rewarding course of carbon market development, and delays in the entry into force of the Kyoto Protocol. Among other regions of the world, the pipeline of projects in northern and Sub-Saharan Africa has not met the expectations of the PCF portfolio development strategy, developed in April 2000.

" The Swedish government regards PCF achievements as exemplary in showing that important socioeconomic gains can, in practice, be met through international cooperation in action against climate change."

GOVERNMENT OF SWEDEN

PCF Participant

RABOBANK

The Rabobank Group is a broad financial services provider with a balance sheet of US$400 billion. The group consists of 340 independent local cooperative Rabobanks, with more than 1.25 million members. In its Dutch home market, the Rabobank Group has 9 million private and business customers and is market leader in virtually every area of financial services. Rabobank is also the largest internet bank in Europe. The Rabobank Group is represented internationally with 169 locations in 34 countries. It has received the highest credit rating from the major rating institutes and was selected as the world's safest bank by Global Finance each year from 1999 to 2002. The Swiss rating agency Sustainable Assets Management gave the Rabobank Group the second highest sustainability rating of banks worldwide in 2002.

Participation in the PCF was Rabobank's first step into the emerging carbon market, and Rabobank is still very active in the PCF. Building on its network of offices in countries such as India, Brazil, Chile and China, Rabobank is presently running an efficient and fully integrated carbon finance operation. Having signed an emission reduction procurement contract with the Dutch government, Rabobank is the first private financial institution to run a carbon fund. Rabobank's Environmental Financial Products department, based in London is able to assist clients in managing their compliance risks and help them to deploy their capital in environmental asset markets. Rabobank has set up electronic trading portals for environmental commodity trading (nitrogen compounds, carbon dioxide and Renewable Energy Certificates). More recently, Rabobank joined a pan-European initiative for the retail market to market low-carbon or carbon-neutral consumer products.*

RWE

RWE is Germany's fifth-largest industrial company and ranks among the world's leading multi-utility companies. Its core businesses are electricity, gas, water and environmental services.

RWE recognizes and upholds the value of sustainability as the guiding principle of international development and strives to conduct its own business accordingly. RWE has documented its progress towards sustainable development in our "Roadmap to Sustainability." We have set concrete milestones for achieving our sustainability objectives while strategy, implementation and communications are becoming increasingly integrated.

As part of our climate change mitigation strategy and in order to gain experience with project based greenhouse gas emission reductions, RWE joined the PCF—the only German industrial company to take part. We have also been fortunate enough to benefit from the unique opportunity of a PCF fellowship for one of our environmental protection experts.*

SHIKOKU ELECTRIC POWER CO., INC.

Shikoku Electric Power Co., Inc., is this year marking 52 years since it was established in 1951. Shikoku Electric Power is one of the 10 electric utilities in Japan that carry on the integrated process of generating, transmitting, distributing and selling electricity in their respective service areas. The company provides high-quality, low-cost, stable electricity of 26 terawatt hours to more than 4 million customers on Shikoku Island.

Shikoku Electric Power perceives environmental concerns, especially climate change, as one of the key issues for corporate management. The company is making every effort to promote environmental protection measures at the power supply facilities to achieve a stable and well-balanced combination of power sources in the development, installation, operation and maintenance stages.

As further measures to fight global warming, Shikoku Electric Power recognizes that market mechanisms are crucial for the sustainable development of human activity. Our international investments for global warming supplement our domestic initiatives. Therefore, Shikoku Electric Power participated as an original member of the Prototype Carbon Fund in January 2000. In response to the PCF proposal in 2002, Shikoku Electric Power made an additional contribution of US$5 million, thus bringing our total contribution to US$10 million. *

STATOIL ASA

Statoil is an integrated oil and gas company headquartered in Stavanger, Norway with about 17,000 employees worldwide. In 2002, we produced an average of 1.1 million barrels of oil equivalent per day—92% from the Norwegian continental shelf. We are one of the largest net crude exporters in the world, a leading supplier of natural gas to Europe and a major retail brand in Scandinavia and the Baltic states.

Statoil's greenhouse gas emission reduction strategy involves cost-effective emission cuts in our operations, participation in emissions trading, and project-based mechanisms specified in the Kyoto Protocol. We support the World Bank's gas-flaring initiative, which aims to reduce gas flaring worldwide. We seek to develop our leading position in subsurface injection and storage of carbon dioxide into an industrial business opportunity, capitalizing on our carbon dioxide sequestration at the Sleipner field in the North Sea. For this, Statoil received the World Petroleum Congress award of excellence for technological development in 2002.

Statoil's participation in the PCF is based on a wish to contribute to implementation of the Kyoto Mechanisms to the benefit of the development of non-Annex I countries and to enable Statoil to meet obligations for greenhouse gas emission limitations cost-effectively. Statoil has confirmed its commercial trust in the PCF by extending its participation from US$5 million to US$10 million.*



TOKYO ELECTRIC POWER COMPANY

Tokyo Electric Power Company is the world's biggest private sector power company. We consume a large quantity of resources in the power generation process and our emissions of carbon dioxide accompanying power generation account for about 9% of Japan's total emissions. To keep these emissions down to the barest minimum, we have been positively promoting environmental measures such as improving power generation efficiency, promoting nuclear power and renewable energy, etc.

In addition to these internal measures for reducing greenhouse gas emissions, we are aiming to make use of the Kyoto Mechanisms. Participation in the PCF has led us to take a step into these new mechanisms, which still remain uncertain. Our company has been engaged in the PCF from its launch, and served as a Participant Committee member to support it.

Although the Fund has only just started to receive actual emission reductions, we the participants have already gained lots of benefits from the PCF. Most important of all, we have dispatched two of our employees through a staff exchange program, acquiring hands-on expertise and knowledge as members of the Fund Management Unit. With this knowledge and experience, we have become one of the leading companies in this field in our country. We are proud to be a part of this as a PCF Participant, and we are willing to cooperate and contribute to the PCF further on.*

TOHOKU ELECTRIC POWER COMPANY, INCORPORATED

Tohoku Electric Power Company was established in 1951 and supplies electricity to approximately 7.6 million customers throughout the seven prefectures of the Tohoku region, in the northeastern part of Japan's main island. Tohoku Electric Power operates facilities under an integrated structure of generation, transmission and distribution. The company's electric power sales in 2002 amounted to 74,255 gigawatt hours, equivalent to those of Belgium.

Addressing environmental issues is one of the key management challenges for Tohoku Electric Power. It has set a Midterm Environmental Action Plan for the coming 3-year period. One of the plan's major emphases is climate change mitigation. As part of this effort, we decided to participate in the PCF. Furthermore, the company has committed itself to nuclear power development and expanding utilization of renewable energy, enhancement of efficiency, and lower fossil fuel consumption at its generation facilities.

Participation in the PCF gives Tohoku Electric Power Company a great opportunity for gaining know-how with regard to the Kyoto Mechanisms, and also to demonstrate to the world community its environmental commitment to climate change mitigation. Through participation in the PCF, we are truly pleased to have acquired our very first emission reductions through a hydropower generation project in Chile.*

* The information contained on this page was provided by the Participants of the PCF and, with the exception of minor editorial changes, is reproduced in the same form in which it was provided. The views and opinions expressed in these pages are those of the companies providing the information, and do not represent the views and opinions of the World Bank or the Trustee. Neither the World Bank, nor the Trustee take any responsibility for the information contained, or the representations made in these pages.

CARBON FINANCE AND THE WORLD BANK

WHY IS THE CARBON FINANCE BUSINESS IMPORTANT TO THE WORLD BANK AND ITS MISSION TO REDUCE POVERTY?

Mitigating climate change by reducing global greenhouse gas emissions is classified as an important priority for World Bank operations, leading to substantial benefits for Bank borrowing member countries. The limited existing capacity in developing countries in originating Clean Development Mechanism (CDM) and Joint Implementation (JI) projects and undergoing CDM/JI transactions led the World Bank Group to undertake a pioneering role in developing the market for greenhouse gas emission reductions through the establishment of the Prototype Carbon Fund.

The World Bank's carbon finance initiatives, including the PCF, are an integral part of the Bank's mission to reduce poverty through its environment and energy strategies. The threat climate change poses to long-term development and the ability of the poor to escape from poverty is of particular concern to the World Bank. The impacts of climate change could unravel many of the development gains of the last several decades. The Bank is therefore making every effort to ensure that developing countries can benefit from international efforts to address climate change.

A vital element of this is ensuring that developing countries and economies in transition are key players in the emerging carbon market for greenhouse gas emission reductions. The role of the Bank's Carbon Finance Business is to catalyze a global carbon market that reduces transaction costs, supports sustainable development and reaches and benefits the poorer communities of the developing world.

Carbon finance plays an important role in the Bank's efforts to achieve a broad range of institutional goals and to meet commitments made (a) through sector strategies in the infrastructure and environment sectors, (b) at the Johannesburg World Summit on Sustainable Development, and (c) under the Millennium Development Goals (MDGs). Over and above its impact on reducing greenhouse gases—a specific MDG indicator in itself—carbon finance can directly catalyze sustainable investment in a broad range of areas, ranging from afforestation and biodiversity, to renewable energy and solid waste management.

(a) Linkages with Bank Sector Strategies

As the Bank's carbon finance operations have illustrated, there are numerous opportunities for cross-sector collaboration. Carbon finance has acted as a powerful catalyst in developing projects that promote rural electrification, renewable energy, improvements in urban infrastructure, sustainable forestry practices and water resource efficiency. The PCF has demonstrated the far-reaching potential of a fully implemented CDM/JI Mechanism by improving basic service delivery through private participation in infrastructure and supporting the development and reach of markets.

A glance at the PCF project portfolio reveals the full range of PCF contributions to the World Bank's strategic goals in the fields of energy and environment. The small hydropower projects in Latin America and Africa have resulted in improved access to clean, renewable energy by poorer communities, and in the case of Chile Chacabuquito also led to a strengthening of policies governing land-use and biodiversity protection in the project area. Energy efficiency projects in Bulgaria and the Czech Republic will lead to reductions in pollution from commercial sources of energy and enhanced urban air quality.

Romania's afforestation project will improve soil fertility, and assist in soil stabilization and ecological reconstruction, in addition to generating emission reductions. In Moldova, the PCF's soil conservation project will generate employment through afforestation work and forest management, and is expected to create income through the sale of forest products. In addition, the project will enhance sustainable agricultural production through protection of soil against erosion and landslides.

PCF Asset Creation

CREATING THE CARBON ASSET

The carbon asset refers to the verified greenhouse gas emission reductions that a project generates when comparing its emissions to emissions in a baseline scenario. The baseline scenario describes the situation that would prevail without the project. The baseline scenario is determined by applying a baseline methodology. The Kyoto Protocol has established an Executive Board to oversee the Clean Development Mechanism and to approve baseline methodologies. Project developers must use approved baseline methodologies in order to create emission reductions which can be used for compliance under the Kyoto Protocol. Setting the baseline for a project therefore is an essential step in the PCF carbon asset creation process.

Through submission of a number of diverse baseline methodologies for approval by the CDM Executive Board, the PCF has become a key contributor to the development of internationally approved CDM baseline methodologies. Since its inception, the PCF has developed and applied baseline and monitoring methodologies to more than 30 projects. About two-thirds of these projects are CDM projects, including several small-scale CDM projects. The PCF has also developed methodologies for about 10 Joint Implementation (JI) projects, and for three land-use projects (one CDM, two JI).

The projects from which the PCF draws its emission reductions fall into five categories:

- Regular-size CDM projects where the measurement and calculation of the emission reductions are based on the modalities and procedures for CDM projects approved by the seventh session of the Conference of the Parties to the UNFCC (COP-7) and subsequent guidance from the CDM Executive Board.
- Small-scale CDM projects where quantity calculations are made using the simplified modalities and procedures for small-scale projects approved at COP-8.
- CDM projects involving afforestation and reforestation for which COP-9 is expected to agree on the modalities and procedures for measurement.
- JI projects (including land-use projects) for which greenhouse gas reductions are calculated based on the agreed modalities and procedures for JI, but for which the regulatory requirements are not yet in place; and
- First-track JI projects, for which the respective host countries are expected to establish the regulatory infrastructure.

To date, the main focus for the PCF has been on regular-size CDM projects, where the Executive Board is now making decisions on the applicable regulatory infrastructure, including:

- Approving methodologies for establishing baselines and calculating emission reductions.
- Accrediting Operational Entities which will validate projects and verify emission reductions based on an approved methodology.
- Establishing CDM Registries for recording project activities and Certified Emission Reductions.

In support of PCF asset creation, the PCF has an active dialogue with the CDM regulatory bodies, with experts reviewing methodologies, and with PCF Participants to share the lessons learned and the concerns that the PCF and other project developers have accumulated in years of work on the project-based mechanisms. To date, the PCF has worked with four out of 17 firms now applying for accreditation as Operational Entities. The PCF also supports the Validation and Verification Manual (http:www.VVManual.info), which is currently being developed by prospective Operational Entities with the help of the International Emissions Trading Association (IETA); and the PCF promotes the inclusion of developing country firms in the list of Operational Entities. Finally, PCF shares its insights and needs regarding the design of emission reduction registries with the relevant UNFCCC bodies. The registration of projects and the issuance of Certified Emission Reductions could become possible as early as 2004.

PCF PERFORMANCE 2003

continued

OVERVIEW OF SUBMITTED PCF BASELINE METHODOLOGIES

In 2003, the PCF Fund Management Unit submitted eight baseline and monitoring methodologies (along with seven demonstration projects) to the CDM Executive Board for approval. These methodologies were exclusively in the electricity and waste management sectors:

- April-July-October 2003: The Methodology Panel recommended and the Executive Board approved two waste management project methodologies and invited resubmission of one energy sector methodology.
- September: Methodologies for one waste and three energy sector projects were submitted and are currently under review by the Methodology Panel.

The PCF experience indicates that the complexity of methodologies depends on the sector to which they are applied. The methodologies for most waste management projects are relatively straightforward and employ a financial analysis based on the expected rate of return, or a comparison of the costs combined with direct monitoring of captured landfill gas emissions to calculate reductions. The methodology proposed by the PCF for modestly-sized electricity projects seems less straightforward. The Executive Board did not approve the PCF's least-cost analysis that describes the baseline scenario in connection with the proposed monitoring of system expansion and marginal dispatch, and identifies the system changes to calculate emission reductions. (El Canada Hydro project)

In September 2003, the PCF submitted a methodology that is similar to the one proposed for the El Canada project, but enhanced with system expansion and dispatch models and applied to a clearer demonstration project (Jepirachi Wind Power). The PCF also submitted a power sector methodology that uses a barrier analysis to determine additionality combined with a simple formula to calculate a baseline emission factor. The Methodology Panel is currently reviewing these submissions, as well as PCF methodologies for a biofuel and a waste management project in India.

To date, the CDM Executive Board has approved a total of six methodologies. It is therefore difficult to predict which proportion of the PCF portfolio would be covered by approved methodologies. Nevertheless, assuming that the Executive Board approves the CDM methodologies the World Bank has submitted so far, up to a third of the current PCF portfolio may be covered. This ratio may further improve if approved methods submitted by other project developers will be applicable to PCF projects.

The PCF is now working on redesigning its portfolio of small-scale projects, using the approved simplified modalities and procedures. The PCF portfolio already includes the first batch of projects that were developed using the simplified modalities and procedures for grid-connected power projects. The PCF will complete the validation of these small-scale projects as soon as Operational Entities have been accredited and designated.

The PCF's methodologies for Joint Implementation projects follow, in large part, the above ideas, in most cases using some form of financial analysis. The PCF has developed and obtained preliminary validation for two standard methodologies, now used by the Czech authorities for small energy efficiency and district heating projects in the PCF portfolio. Methodologies for two public afforestation projects were also developed.

In the months ahead, the PCF will submit further methodologies to enhance the learning value and bring its portfolio nearer to closure. The Fund Management Unit is aiming to have most of the PCF's CDM projects officially validated by a Designated Operational Entity and ready for registration within the next twelve months. UNFCCC recognition of the PCF's Joint Implementation projects will need to wait for the establishment of the regulatory system for JI. But this uncertainty may be mitigated where host countries will operate under first-track JI provisions.



The landfill gas-to-energy projects in Latvia and South Africa ensure the sustainability of efficient landfill management through the provision of revenues from emission reductions. In the case of the Durban landfill gas project, an incremental payment of US$ 0.20 per ton of greenhouse gas emission reductions will be provided for a social action project to benefit local stakeholders, in line with the Bank's policy of participatory social initiatives.

As the portfolio has developed, the dovetailing of strategic interests among greenhouse gas mitigation, the improvement of the local environment and provision of access to clean and reliable energy has become increasingly evident. The availability of carbon finance has played a crucial role in forging these linkages.

(b) World Summit on Sustainable Development (WSSD) and the Johannesburg Declaration

The Plan of Implementation adopted at WSSD in September 2002, shares a number of the strategic thrusts articulated in the Bank's energy and environment strategies. It urges actions to improve access to environmentally sound energy services and resources, and to accelerate increased access of the poor to reliable, affordable, environmentally sound energy services as a means to improve standards of living.

The WSSD Plan of Implementation highlights specific tools and instruments for achieving these goals, all of which are embodied in the Bank's carbon finance activities. They include:

- Development and dissemination of clean and renewable energy technologies to developing countries (including hydropower), cleaner liquid and gaseous fuels, biomass technologies, reduced venting and flaring of gas in crude oil production, and energy efficiency;
- Development of indigenous energy sources for rural communities;
- Innovative financing mechanisms;
- Internalization of environmental costs, for example through the application of the "polluter pays" principle;
- Use of environmental impact assessment procedures; and
- Dissemination of best practice on environmentally sound technologies.

The Plan of Implementation focuses specifically on improving energy access in Africa to 35% within 20 years and promoting cleaner and more efficient energy technologies there—including renewable energy, natural gas, energy efficiency and cleaner fossil fuels—particularly in rural and peri-urban areas.

(c) Millennium Development Goal (MDG) #7: Ensuring Environmental Sustainability

Carbon finance helps the Bank achieve the Millennium Development Goal of ensuring environmental sustainability. This MDG specifies the following indicators for achieving this goal:

- The proportion of land area covered by forest;
- The land area protected to maintain biological diversity;
- The gross domestic product per unit of energy use (as proxy for energy efficiency); and
- Carbon dioxide emissions (per capita).

The World Bank's current and proposed activities in carbon finance target not only the broader goal of reducing carbon dioxide emissions—and potentially mitigating climate change—but also support the Bank's broader sectoral strategic thrusts and development objectives.

COLLABORATION

LEARNING BY DOING

In the four years since the PCF was established, this prototype fund developed more than 50 projects to an advanced stage of preparation and reviewed more than 420 project proposals. While the Fund's focus has been on obtaining high quality greenhouse gas emission reductions, the contribution PCF projects make to sustainable development, whether in the Clean Development Mechanism or through Joint Implementation should also be emphasized. In the pages that follow, the main PCF stakeholders—project host country representatives, PCF Participants, and project intermediaries—reflect on this dimension of the PCF's learning by doing. However, in many respects the projects speak for themselves. Their contribution to sustainable development is evident in the descriptions of projects as diverse technically and geographically as a waste management project in Hungary, a landscape rehabilitation project in Moldova, a wind power project in Colombia, and a hydropower project in Uganda.

LEARNING BY DOING

THROUGH THE PCF...REGIONAL PERSPECTIVES

THE PCF AND THE CLEAN DEVELOPMENT MECHANISM

"The PCF was instrumental in helping us realize the value of the emission reductions from the Guatemala El Canada Project. The PCF helped us navigate the complex set of standards and norms to put together an emission reduction project that minimized risk while preserving value. In particular, the PCF's willingness to purchase emission reductions despite the Project's uncertain CDM status illustrates the Fund's commitment. The immediate outcome has been an Emission Reductions Purchase Agreement. The long-term outcome will be the application of the many lessons learned from the process as we develop future projects for the broader greenhouse gas market."

JULIE SMITH-GALVIN, *Manager, Project Planning, Energia Global Ltd.*

"Emerging markets need to build their institutional framework in order to become real options for investments. The CDM market is one such example. Its operations also constitute the test field for the efficient performance of the greenhouse gas market. The Carbon Finance Business at the World Bank has established one of these test fields, with pioneering implementing facilities such as the PCF. These undertakings constitute a great support for projects in developing countries in the Latin America and Caribbean Region, by ensuring the purchasing agreements needed to continue with the processes of investment and implementation of CDM activities in the region."

SERGIO JÁUREGUI, *Coordinator - National CDM Office, Bolivia*

"The Clean Development Mechanism provides a unique opportunity for India to catalyze sustainable development and to leverage the transfer of technology and financial resources. The CDM project development process in India was initiated with the PCF. The government of India is fully committed to having a formal institutional set-up to endorse potential CDM projects. With its enormous industrial and manpower strengths, India has an excellent opportunity to play a leading role in the CDM market from the selling side. If the early relationships put in place are healthy, it is likely that India will emerge as a preferred-venue for sourcing Certified Emission Reductions as well as outsourcing carbon-financing-related services for the global CDM market."

KIRTAN C SAHOO, *Specialist - Environment & Decentralized Infrastructure, IDFC-Infrastructure Development Finance Company, India*

ROLE OF THE PCF IN JOINT IMPLEMENTATION COUNTRIES

"Climate change mitigation is one of the environmental priorities of the Czech Republic which is actively seeking to implement the Kyoto Protocol and Joint Implementation projects through two main project implementing agencies, the Czech Energy Agency (CEA) and the State Environmental Fund (SEF). The cooperation with the World Bank is a first step towards developing the Joint Implementation market in the Czech Republic. The PCF has provided CEA and SEF an opportunity to start the concrete implementation of JI projects in the sectors of energy efficiency, district heating, and renewable energy."

JOSEF BUBENIK, *Director CEA;* **ANDREJ MUDRAY,** *Director SEF*

"Development and implementation of JI projects has been a challenging process for the PCF and also for the host countries. The PCF offers a unique opportunity for host counties to discuss crucial problems related to project preparation and evaluation, but also to share with the PCF team and participants, policy development and project implementation challenges. JI projects also improve the understanding of climate change at the policy and decision-making level in host countries. This will create a solid basis for the long-term policies targeted on achieving our common global goal—mitigation of climate change."

ILZE PURINA, *Chairperson of the Board, Latvian Environmental Investment Fund*

PROJECT:

UGANDA WEST NILE HYDROPOWER

SMALL-SCALE CDM PROJECTS BRINGING THE BENEFITS OF CARBON FINANCE TO SUB-SAHARAN AFRICA



Wedged between the Congo, the south of Sudan and the West Nile river, the 1.5 million people in Uganda's West Nile region live in relative isolation from the rest of the country. Road connections are few, and driving conditions difficult. Nowhere in Uganda is oil and gasoline more expensive than in the West Nile. The national power grid does not reach into the northwest of Uganda, and power from generators is available only for a lucky few and only for a few hours a day.

Some entrepreneurs have started mills and small workshops, outfitting them with old diesel generators that are very expensive to operate. Some institutions such as the hospital and some of the richer households have their own diesel generators that help them escape the scarce and unreliable public power service. The growth in individual generators is indicative of a general upswing in economic activity in the region. But life without good roads, reliable electric power, and, until recently, public telephones, remains a challenge.

This will all change when, in a few months, the first new power will flow to customers, produced by a private company that won the concession to generate and distribute power in the West Nile. The PCF has been instrumental in making this possible. In early 2004, the West Nile Rural Electrification Company Ltd. plans to start up their new efficient diesel generators in the West Nile towns of Arua and Nebbi, to provide reliable power to the population during the day and most of the night.

This is the first carbon finance project that has been approved in Uganda, with an Emission Reductions Purchase Agreement signed in March 2003. The company must expand their customer base quickly, because not only their income from power sales to the local population and industry, but also the PCF payments for emission reductions will depend on the speed and performance with which they manage the conversion. PCF payments also promote the construction and operation of the two new small run-of-river hydropower plants of 5.1 and 1.5 megawatts. Hydropower will significantly increase the emission savings and therefore the income to the company from selling the emission reductions to the PCF.

Reliable power will soon be available for workshops and hospital, for schools and households, and it will release the development potential that is buried in the West Nile's soils and people.

Impact of Carbon Finance

The PCF's experience has shown that carbon finance can dramatically improve the return on climate-friendly investments, particularly on those involving greenhouse gases with high global warming potential. At prices currently paid by the PCF, carbon revenues from a typical landfill gas to energy project, for example, can contribute about US$15 per megawatt hour, potentially increasing project internal rates of return by 5 percentage points or more. Carbon finance can also provide a strong revenue stream to biomass projects that use generated power from organic wastes that would otherwise be land-filled (e.g. wood residues from pulp production or empty fruit bunches from palm oil production).

In general, the contribution of carbon finance to renewable energy, forestry and other projects that mitigate or sequester greenhouse gases tends to be more modest.

RISK MANAGEMENT

The PCF pays for verified emission reductions as they are generated and transferred. The payments the project receives under an Emission Reductions Purchase Agreement are therefore made annually over a period of 5-21 years. Whereas the PCF's financial risk is mitigated through the "payment on delivery", the Fund still has to carefully manage the risk of non-delivery of verified emission reductions.

In order to reduce the uncertainty regarding the expected volumes of future emission reduction flows, the PCF has developed a risk management strategy along three major axes: project screening, structuring of the transaction and risk management across the portfolio.

Today, the PCF puts even more emphasis on a careful upstream screening of projects through early financial and technical analysis of projects. At the initial review of Project Idea Notes, the fund management team assesses the financial and technical viability of the project as well as potential project risks. Expertise is also sought to discuss unfamiliar technologies and specific conditions in host countries. At this point the Fund Management Unit also assesses whether the project is consistent with the PCF's portfolio development criteria and objectives. At the stage of development of a more comprehensive Project Concept Note, the fund management systematically applies the risk matrix introduced in 2002 to analyze a range of risks—project, country, baseline, Kyoto Protocol-related and market (or price) risks—in further detail. During project appraisal, a team of experts ensures the project's consistency with the World Bank Group's standards for financial, technical, social and environmental sustainability, and for coherence with the host country's development objectives. These improved screening tools have helped the PCF to identify potential project risks at an early stage in project development.

PCF PERFORMANCE 2003

continued

During the negotiations of the terms of the transaction, the risks are shared among the project partners according to the principle that the party which is better equipped to mitigate a risk will assume such risk. In general, PCF transactions are structured so that the project sponsors and their creditors assume most project risks, while the PCF bears most of the Kyoto Protocol-related risks. Through the negotiation of a fixed price, the price risk is shared among the counterparts. This structure provides incentives for both parties to perform. Some carbon contracts provide the project sponsors the opportunity to sell a fixed volume of the annual emission reductions—generated above the minimum amount due to the PCF—to a third party. This allows project sponsors to benefit from some of the potential upside which may be offered if carbon prices rise, while still providing certainty that a fixed volume of emission reductions will be transferred to the PCF at a fixed price.

The Fund Management Unit has developed a portfolio risk management strategy by identifying and quantifying the PCF's exposure to delivery risk (i.e. the risk that projects with which the PCF has signed Emission Reductions Purchase Agreements will not deliver the contracted volume of verified emission reductions), developing risk management tools—notably call options—and monitoring the evolution of risk over time. Call options are a simple tool to manage emission reduction delivery risk across the portfolio. They give the buyer the right, but not the obligation, to buy emission reductions at a specified strike price. To monitor the evolution of the portfolio, including the availability and exercise of these call options, the Fund Management Unit has established an electronic emission reductions database through which the participants may track the volume of contracted and expected emission reduction deliveries, as well as the amount of emission reductions already transferred to the PCF.

Together, these risk management policies and tools have enabled participants to better plan the expected greenhouse gas emission reduction deliveries from the PCF.

" With constant electricity we will create jobs for people, we will have value for products, we will have extra income … I think that those who have not taken the initiative to obtain carbon finance funds, should move quickly, because it is beneficial both globally and locally."

KABAGAMBE KALISA

Permanent Secretary, Uganda Ministry of Energy

WILL THE WEST NILE PROJECT BE SUSTAINABLE?

An important innovation with which the Clean Development Mechanism assists host countries in achieving sustainable development is its long-term approach to development. The emission reductions from CDM projects will have to be verified by an independent "operational entity" for as long as 21 years. The PCF contract with the West Nile company runs through 2017. Thus, a regular review and verification of the project's technical, commercial and emission-reduction performance is critical for a successful commercial relationship with any carbon buyers.

The PCF has also included in the verification process a review of the project's long-term social and environmental performance. Thus, there is a good chance that, by the end of the project's crediting period, the region will have made enough economic progress, and built enough local capacity, to ensure that the people of the West Nile are assured a long-term reliable power source, with all the inherent economic benefits that would follow.

" Capacity building remains the single most important requirement for African countries. This is required for project preparation, marketing and negotiating skills for negotiation of Emission Reductions Purchase Agreements. Many of the countries need help to set up Designated National Authorities (DNAs) to facilitate CDM transactions. Most of the countries need financial assistance to set up these institutions. One of the main constraints facing project developers is lack of underlying finance and many would prefer upfront payments against future emission reductions."

BWANGO APUULI

Commissioner for Meteorology, Uganda/
National Focal Point for UNFCCC

PROJECT:

JEPIRACHI WIND POWER

THE FIRST PCF PROJECT TO PAY A PREMIUM FOR BENEFITS FOR THE SUSTAINABLE DEVELOPMENT OF THE COMMUNITY

A windswept coastal arid land, the Guajira region on Colombia's northeast Atlantic coast is one of the poorest on the South American continent. An inhospitable environment has made everyday life on their traditional lands miserably difficult for the region's indigenous Indian people, the Wayuu. There is no permanent access to drinking water, which results in a high level of disease in an area with ill-stocked health centers and lack of access to education.

But things are looking up for local Wayuu in La Guajira. The PCF, through the provision of carbon finance, hopes to contribute to improving the welfare of this disadvantaged community. In December 2002, the PCF signed an agreement with the utility company Empresas Públicas de Medellín to purchase 800,000 tons of greenhouse gas emission reductions from the 19.5 megawatt Jepirachi Wind Power Project, which is located in the Wayuu Indigenous Territory of the northeast Atlantic coast of Colombia in the Department of Guajira. Once construction is completed in February 2004, the fifteen windmills will be delivering around 68.3 gigawatt hours per year to the Colombian national grid. Over a 21-year period, the project will prevent carbon dioxide emissions of 1,168,000 tons, which would occur if the power were generated by conventional methods.

The name Jepirachi means "northeast wind" in the Wayuu language, and indeed the location is ideal for wind generation—at a height of around 60 meters the average wind speed is 10 meters per second. And the wind is constant, ensuring a high annual yield of power.

The Jepirachi Wind Power Project was used as a basis to propose a new baseline methodology to the Clean Development Mechanism Executive Board based on least cost analysis and optimization modeling for renewable energy capacity additions to existing power systems. It was also the basis for the proposal of a new monitoring methodology for capacity expansion projects which replace electricity that would otherwise be generated and dispatched to the grid by other power plants.

" I am happy with the (Jepirachi) project, here in my land, in my community, for our children…we have suffered so much with no water, no services…thanks to God…with this support for our needs, our people benefit."

LAURA URIANA

Mother, Rancheria Kasiwolin

" The Jepirachi project has its roots in the corporate environmental policy of the company. With this project we support sustainable development and generate local social welfare, wherever we act."

LUIS CARLOS RUBIANO ORTEGÓN

Deputy Manager for Energy Generation Planning, Empresas Públicas de Medellín

SUSTAINABLE DEVELOPMENT AT THE NATIONAL AND LOCAL LEVEL

The Jepirachi Wind Power Project will contribute to the sustainable development of Colombia in many ways. First, it will demonstrate the potential for wind-based generation at the commercial level, thereby facilitating investments that will capture the relatively large wind-energy potential identified in the country.

Secondly, the Jepirachi Wind Power Project will contribute to the capacity to increase the share of non-hydroelectric energy in the national grid, which is currently dominated by hydroelectric and thermal energy options. This is critical for Colombia, as it must enhance the grid's reliability of supply to avoid the forced rationing experienced during the 1990s after severe droughts caused power shortages. Without carbon finance, the favored option for capacity additions would be thermal energy given its relatively low cost.

Finally, the Jepirachi Wind Power Project will contribute to the development of the host indigenous community, which is among the poorest in the country, by financing a series of community-driven projects designed in consultation with the project sponsor, that are above and beyond what is required by the system of transfers mandated by Colombian law. The social plan was the result of extensive consultation with the community and the project developer about community needs. The main features of the social plan are: training to facilitate direct and indirect job creation; the provision of a water desalinization plant fed by wind power and the provision of water storage depots; the rehabilitation of the graveyard; health and educational facilities, as well as the refurbishing of a health center, including solar-powered refrigeration capacity. By targeting water supply, education and health services, the project addresses the priorities for social development identified by the community. There is also an agreement between the project sponsor and the host indigenous community to review the program two years following its implementation.

For its part, the PCF has agreed to pay a premium of US$0.50 per ton of emission reductions upon the implementation of this plan—in addition to the funds for the purchase of 800,000 tons—which will be monitored using a series of specified indicators. The Emission Reductions Purchase Agreement contains an innovative clause that identifies under which conditions this premium will be paid, namely upon delivery of the emission reductions and upon verification that the social plan has been implemented.

PROJECT:

THE LIEPAJA SOLID WASTE MANAGEMENT

A TRUE PIONEER, LIEPAJA WAS THE FIRST PROJECT UNDERTAKEN BY THE PCF

One of Latvia's environmental priorities is the development of sanitary landfills and the improvement of solid waste management. Existing landfills pose an environmental and public health hazard and in some cases leachate from these sites pollutes the shallow groundwater from which 70% of drinking water is obtained. In coastal areas like Liepaja, Latvia's third largest city, leachates can reach the harbor and then the Baltic Sea.

The Liepaja Solid Waste Management Project brings a state-of-the-art waste management system to the Liepaja region in Latvia. The project will establish a waste management facility demonstrating self-sustaining, modern management of municipal solid waste through maximum collection and utilization of landfill gas in the district of Liepaja. Other objectives include: a) demonstrating modern sanitary landfill techniques on a regional basis; b) strengthening institutional capacity at the local/regional levels on issues related to municipal solid waste management; c) arresting the on-going contamination of groundwater; d) reducing environmental disamenities for neighbors of existing disposal sites that would be closed; e) facilitating the separation of recyclable material; and f) reducing greenhouse gas emissions through an Emission Reductions Purchase Agreement with the PCF.

The contribution from the PCF has made it possible to install a state-of-the-art system—which would allow for the maximum collection of generated methane—that would not otherwise be affordable. This system would help to lower greenhouse gas emissions in two ways. First, it mitigates the methane emitted by decaying waste; and, second, it substitutes landfill gas—which will be used to generate electricity—for fossil fuels. Over a 20 year lifetime, the project will reduce greenhouse gas emissions by almost a million tons of carbon dioxide.

This project is covered by one of the first Joint Implementation activities under the Kyoto Protocol, and has allowed Latvia to take full advantage of the opportunities emerging from the nascent carbon market. Perhaps, of most immediate benefit to the environmental quality of life for people in the area, 22 of 26 existing obsolete dump sites have been closed under the project, with the other four to be closed in 2004.

PCF Financial Performance

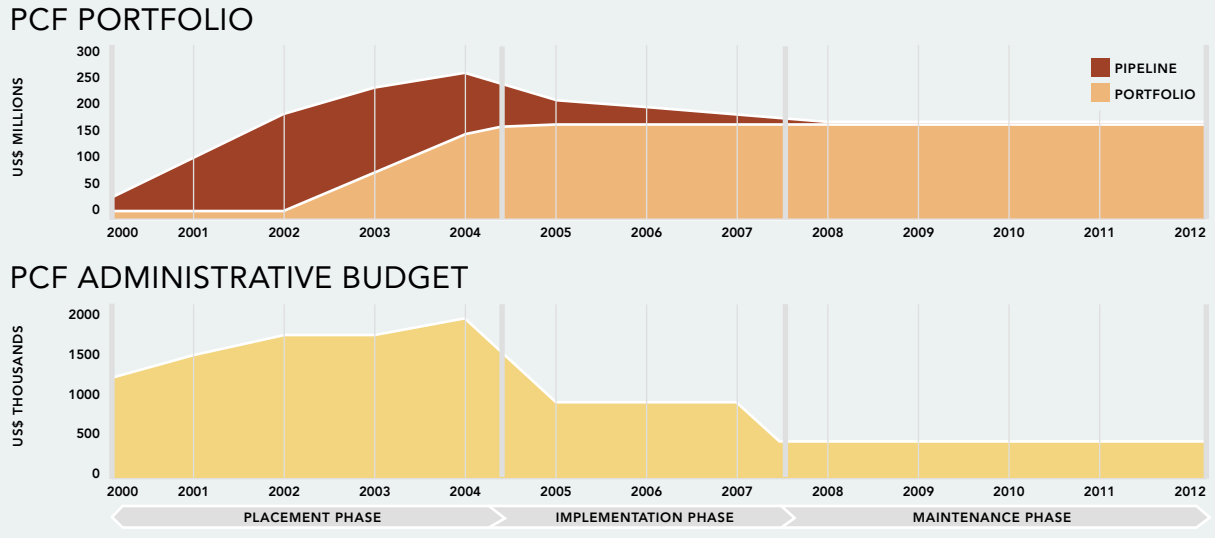
In FY03, the PCF completed its third year of operation, with a successful track record of project development, learning and knowledge sharing, as well as solid and reliable financial performance. The Fund has developed a high-quality and cost effective project pipeline that is pursuing new projects while balancing the need to reduce costs and limit risks in the portfolio. In FY04, the Fund will conclude the placement of its financial resources to projects (placement phase), and gradually shift towards the implementation of the projects (implementation phase).

The Fund Management Unit recently developed a model of the Fund lifecycle. The first four years of the Fund's life are characterized as the placement phase as most efforts are dedicated to developing the project pipeline—finding new projects, managing them to the stage where the project contract can be signed (Emission Reductions Purchase Agreement), and notionally committing the Fund's allocable balance. During this stage a large number of projects will be under review, and a correspondingly high number of projects dropped due to lack of underlying financing or delays in the development of the project.

Once the PCF funds are committed to projects, the Fund will move into the implementation phase, when the contracts are signed, and the projects are under implementation and finally become operational. In this stage the PCF will focus on handling project implementation risks and reacting to new implementation challenges. Some projects are expected to drop out of the portfolio at this stage, but at a significantly lower rate than in the placement phase.

After about three years the Fund will enter into the maintenance phase, in which all projects have been implemented and should be generating emission reductions. This phase shows the lowest risk; the Fund plans to scale down its operation and respond to occasional project non-delivery by exercising options to buy additional emission reductions from other projects in the portfolio.

The diagram shows the three phases of the Fund's life cycle with the corresponding pipeline and resources required to respond to the challenges of individual phases. **Fig. V**



PCF PERFORMANCE 2003

continued

The PCF business model had originally been based on a project financing basis rather than on a commodity purchase basis as it stands now. The current basis significantly reduces the credit and delivery risks of the portfolio. At the end of FY03 the level of funds actually drawn from participants came to 41% of the original drawdown schedule outlined in the Information Memorandum, noticeably increasing the internal rate of return for individual participants. Also, the Fund is currently on target to keep its non-project related costs within its original target of 9% of total available funds. The Fund Management Unit has been cost conscious and over the span of four fiscal years has consistently used less administrative resources than annually approved by participants. The following table shows that trend where from inception, only 83% of total administrative budgets have been used:

PCF USE OF ADMINISTRATIVE RESOURCES

$ IN THOUSANDS	BUDGET	ACTUAL
FY00	350	286
FY01	1,728	1,291
FY02	1,692	1,661
FY03	1,904	1,467
TOTAL	**5,674**	**4,705**

However, as the Fund now moves to conclude the placement phase, the focus will be shifting from management of project pipeline and project development to project implementation. The Fund will be facing some additional challenges due to regulatory uncertainties, particularly as projects are designed before the supporting regulatory environment is put in place. This may potentially increase the level of support needed during the implementation phase.

" I am satisfied with our cooperation with the Prototype Carbon Fund and consider the project which has already commenced as very essential for our city. The City of Liepaja invests a lot of work in various environmental programs as well-kept environment, clean air and the sea are the values we want to leave for the next generations to come."

ULDIS SESKS
Mayor of Liepaja

LIEPAJA SOLID WASTE MANAGEMENT PROJECT DESCRIPTION:

A. Remediation. All existing disposal sites will be remediated and subsequently closed. At the Skede site, which has been in operation for nearly 40 years, the landfill gas will be collected and used for electricity generation.

B. Technical and Operational Improvements. A state-of-the-art solid waste management system, which would meet international sanitary landfill standards will be established. It will include preparation of the new disposal site in accordance with European Union requirements, establishment of a line for reception of waste already separated at the household level and distinct areas for the storage of separated material as well as hazardous waste, which will be transported to another site.

C. Installation of Energy Cells and a Landfill Gas Collection System. Energy cells will be installed for the enhanced degradation of easily biodegradable waste and the accelerated production of landfill gas, containing about 50% methane. The resulting greenhouse gas emission reductions have been partly sold to the PCF under an Emission Reductions Purchase Agreement. Emission reductions will be carefully monitored and subject to periodic verification by a third party.

D. Installation of a Power Generator. An energy conversion unit (gas engine) of about one megawatt capacity which runs on landfill gas will be installed at Grobina, and one of about 0.3 megawatt will be installed at Skede. Both units will be connected to the power grid.

E. Establishment of Waste Collection Points. A system of waste collection points (for areas with small waste volumes) will be established to ensure the efficient transport of waste to the regional disposal site. The collection points will be equipped with separate containers for different types of recyclable materials.

PROJECT:

SUSTAINABLE CEMENT PRODUCTION

THIS PROTOTYPE PROJECT FOR INDONESIA IS THE PCF'S FIRST PROJECT IN THE CEMENT SECTOR



The Sustainable Cement Production Project proposed by Indonesia's second largest cement producer PT Indocement Tunggal Prakasa Tbk (Indocement) is the PCF's first cement sector project for reducing greenhouse gas emissions. Globally, cement production accounts for about 3-4% of total human-induced greenhouse gas emissions. Considerable potential exists in developing countries to reduce such emissions by adopting new technologies, processes and methods in cement production. Indocement—majority owned by the Heidelberg Cement Group of Germany—intends to introduce new types of cement in Indonesia, as well as undertake fuel change projects in the company's three Indonesian locations, namely, Citeureup (about 45 kilometers south of Jakarta), Cirebon (about 300 kilometers east of Jakarta) and Tarjun, in South Kalimantan.

The main objective of the proposed project is to reduce carbon dioxide emissions by implementing technologies and techniques not yet applied in the Indonesian cement industry. The envisaged sale of the emission reductions to the PCF and other carbon buyers under the Clean Development Mechanism contributed to the feasibility of the project. The total greenhouse gas emission reductions over the ten-year crediting period is estimated to be in the range of 10 to 12 million tons.

The proposed project bundles two sub-projects. One sub-project aims to reduce the clinker content in cement by introducing limestone and other alternative materials such as fly-ash and natural pozzolana (Trass) in the finish grinding process (blended cement). Clinker is the main ingredient in cement, which is produced by burning a mixture of raw materials, comprised mainly of limestone and clay, in large rotary kilns at temperatures above 1400 degrees Celsius. About 60% of the estimated emission reductions are attributed to process changes for producing blended cement. In the first phase, alternative materials up to a range of about 6-8% will be introduced into the final cement. Indocement plans to increase this proportion eventually to 20% to introduce new types of composite cements to the Indonesian market.

The second sub-project aims to reduce greenhouse gas emissions by using alternative fuels instead of coal, oil and gas. Indocement will primarily aim to utilize biomass as alternative fuels, such as rice husk, coconut waste and palm oil waste, but will also examine other wastes such as used car tires and waste oils etc. There are considerable amounts of palm oil waste available near Tarjun (South Kalimantan). Indonesia's rice production is mainly located in Java. A substantial amount of rice husk is available especially in West Java near the plant locations Cirebon and Citeureup. The introduction of alternative fuels is expected to commence in 2004 to replace 1% of the total heat consumption for clinker production. This will progressively increase to about 7% in 2007 and will remain at this proportion afterwards.

" We are very happy to cooperate with the PCF for this project. The Clean Development Mechanism is a very new tool for the industry and the PCF is an experienced partner in this field of work, having gained a very good reputation. We believe, that the combination of our expertise in cement technology and the PCF's knowledge about the CDM will lead us to success. In addition to reducing greenhouse gas emissions by using bio fuels and other waste materials produced in the vicinity of the sites, our project will contribute to sustainable development in a socially responsible way."

OIVIND HOIDALEN

Technical Director, Indocement

PROJECT:

MOLDOVA SOIL CONSERVATION

AS THE RULES EMERGE, THIS IS PCF'S TEST CASE FOR CDM SEQUESTRATION

Moldova is an agrarian country, a small, landlocked nation bordering on Ukraine and Romania. Since Moldova's independence in 1991, the country has experienced significant and continued declines in agricultural production, productivity and exports. More than three-quarters of the land is agricultural, and most of the population lives in rural areas. But within the first 5 years after independence, agricultural production declined by 26% and the gross domestic product as a whole fell by 50%. Almost half the people are living below the poverty line, making Moldova the poorest country in Europe.

Due to its landscape and ground profile characteristics, Moldova is constantly affected by landslides. These events most commonly occur during the winter and spring months due to increased precipitation rates and soil saturation. About 20% of Moldova's territory is known to be prone to landslide hazards. Landslides have affected about 44% of human settlements in the past. Agricultural land is particularly at risk due to soil disturbance and loss of vegetative cover. Large areas of agricultural land have been lost. Two of the few mitigation measures available are to afforest or reforest the land to stabilize landslides.

The PCF will assist in this effort through its participation in a project that will plant trees on degraded lands. The Moldova Soil Conservation Project pilots one of the first purchases of emission reductions under the Land Use, Land-Use Change, and Forestry aspect of the Clean Development Mechanism of the Kyoto Protocol. The Emission Reductions Purchase Agreement includes a series of innovative clauses addressing the issue of permanence. The Project will be submitted for registration to the Executive Board of the CDM after the Ninth Session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP-9).

Capturing and Disseminating Learning

One of the main objectives of the PCF is to facilitate learning by doing and disseminate knowledge and information. Within the Fund Management Unit, great emphasis is placed on achieving these objectives through:

- Participant internships where participants send staff to the Fund Management Unit to observe and learn specific aspects of carbon asset creation and management (duration is from several days to several months);
- Sending staff to work in the Fund Management Unit under the World Bank's Staff Exchange Program (duration is usually one to three years);
- Taking part in seminars, workshops and debriefings provided to participants by the PCF at PCF annual meetings or on request.

Since PCF operations began in April 2000, participants have sent 16 interns. In addition, five senior staff from PCF Participants have joined the Fund Management Unit for one to two year assignments under the Bank's Staff Exchange Program.

Interaction with host country representatives is an important part of knowledge and information sharing for PCF Participants. Membership of the Host Country Committee has grown from less than 15 in the first year of PCF operations to over 50 now. Many of the host country representatives manage the Designated National Authorities in their countries and/or are negotiators for their countries in the UNFCCC. To better represent their interests and provide advice throughout the year, host country representatives have formed a steering committee comprised of 12 of their members elected at their annual meetings. The Host Country Committee meets in parallel with the PCF Participants annual meetings, facilitating sharing of perspectives on all aspects of carbon market development. By September 2003, there had been 17 host country fellows in the Fund Management Unit for typically three month fellowships working alongside participant interns and Fund Management Unit staff.

Finally, the PCF has made full use of the internet for storing and accessing key transactional and business documents by PCF Participants and stakeholders in CDM and JI. In the last year the Fund Management Unit has brought the PCF's Help Desk up to full operational status, responding to an average of 71 substantive requests per month. The PCF added the emission reductions tracking system in 2003 to account for the emission reductions being generated by PCF projects.

PCF PERFORMANCE 2003

continued

The PCF's contribution to learning by doing for all stakeholders as part of broader market development continues to expand both through internet services and formal training programs in carbon finance. From 2001 to 2003, web site unique users grew from 16,000 to 25,000 unique users per annum and training days grew from 600 to 2400, dominated largely by host country trainees.

DISTRIBUTION OF UNIQUE VISITORS/HITS ON THE PCF WEBSITE (MAY 2001 - SEPT. 2003)

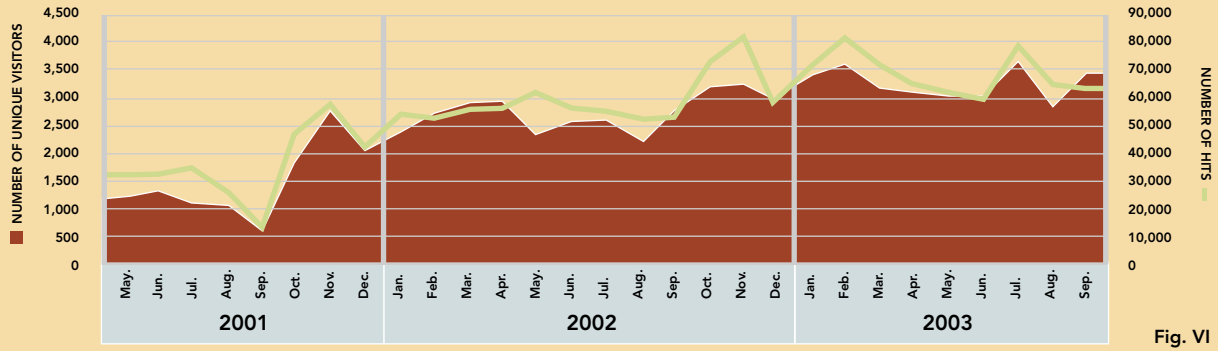


Fig. VI

" The Moldova Soil Conservation Project is of special and primary significance for our country, and is perfectly in line with the Action Plan for the Implementation of the Strategy for Sustainable Development of the National Forestry Sector. Furthermore, the future of this country's people will largely depend on the implementation of this project. A distinct feature of the project is the creation of community forests which unequivocally will contribute to the improvement of the environment and quality of life for people in these areas."

ANATOLIE POPUSHOI

Director General of the State Forestry Agency, "Moldsilva"

RESTORING PRODUCTIVITY TO DEGRADED LANDS

The objective of the project is to restore the productivity of 14,500 hectares of degraded agricultural lands for rural communities and to build community capacity to manage 5,400 hectares of these lands. Planting degraded pasturelands with tree and shrub species adapted to adverse conditions such as poor soils and erosion will provide urgently needed fuel wood and timber to rural communities.

Plant species will include a large variety of native and semi-naturalized species. On land of sufficient quality, *Quercus robur, Fraxinus excelsior,* and many other species of trees and shrubs can be planted. On the most degraded lands, less-demanding species such as *Robinia pseudoacacia* and *Gleditschia triachantos* have to be used. All 1,891 afforestation plots, with an average of seven hectares each, will consist of at least two species. As soil conditions improve, within 20 or more years, an effort will be made to reintroduce more native species to recreate the old forests typical of Moldova.

Project lands belong either to Moldsilva, the national government forestry agency, or to local communities. With communal land, there are two possible courses of action. The community may decide to delegate planting and management to Moldsilva for 10 years, after which the land will be returned to the communities with a number of contractual obligations regarding protection and management. Alternatively, the community may decide to relinquish the land to Moldsilva indefinitely. In both cases, the community has an incentive to transfer the land to Moldsilva given the advanced degradation of the land and its very low economic value, sometimes negative value—even when the arable topsoil has been lost, the owner still has to pay the land tax.

Over a period of about 15 years, the project is expected to sequester 1.8 million tons of carbon dioxide equivalent, around 1.5 million tons of which will be purchased by the PCF. The remainder will be kept in a reserve to mitigate the risk of damage to the carbon asset, in case the new plantings are destroyed by natural or human factors. The total Emission Reductions Purchase Agreement value is estimated at around US$5.1 million.

Moldsilva is the project developer. It will fully finance the estimated US$14 million needed over the first 4 years of the project, while the PCF will purchase the emission reductions resulting from carbon sequestration in above- and below-ground vegetation. Avoided losses in soil carbon stocks resulting from the project have been estimated but will not be part of the PCF purchase.

PROJECT:

HUNGARY: PANNONGREEN PÉCS HEAT AND POWER

HELPING TO MEET THE CHALLENGES OF EUROPEAN UNION ACCESSION THROUGH CONVERSION TO RENEWABLE FUEL

In Central and Eastern European towns and cities, blocks of flats, individual dwellings, hospitals, schools and other buildings receive their heat supply from "district heating systems" that involve centralized boilers connected to a distribution pipe network. District heating is the most economical way to provide heat to high-density urban areas, and is the dominant form of space heating in many cities.

The Pannonpower Group's hard coal-fired CHP plant in the southwest Hungarian city of Pécs, supplies the country's second largest district heating network with 2,250 terajoules of heat per annum, and provides an additional 550 gigawatt of electricity annually to the grid. Pannonpower faces major investment requirements since the plant can no longer continue operation in its current form and still meet the tightening limits on sulphur dioxide emissions from 2005.

Pannonpower evaluated a wide range of alternatives including different mixes of fuels and technologies: scrubbers, "clean" coal, fuel switch to natural gas and fuel switch to natural gas and biomass. Without carbon finance, the baseline study indicated that the most financially attractive alternatives would have been either continuous operation on coal with a scrubber or fuel switch to natural gas—natural gas being marginally more expensive—while fuel switch to biomass came a distant third.

Biomass fuel is available in the region in the form of substantial excess firewood residues and sawdust. Biomass for the project will be supplied by Forest Stewardship Council certified forests under long-term fuel supply contracts with two state-owned, regional forestry companies.

With the long-term fuel supply contracts with the two forestry companies, and an Emission Reductions Purchase Agreement with the PCF for the sale of 1.2 million tons of carbon dioxide equivalent emission reductions from 2008, financing for the conversion of one of four blocks from coal to biomass was secured from Hungary's largest commercial bank. Pannongreen, the project company, will be the owner and operator of the biomass block. Two other blocks will be converted to natural gas. Commercial start is scheduled for September 2004.

The biomass block will have a capacity of 65 megawatts thermal and 49 megawatts electric, with annual generation of 160 terajoules heat and 334 gigawatt electric.

Through the use of carbon financing to kick-start the process, Pannonpower will assure a continuous heat supply in a way that will benefit all parties. Due to improved efficiency of the refurbished plant, the plant will be able to maintain its output with a smaller capacity and lower fuel use. As for the local and global environmental benefits, the company should now be able to comply with the new European Union environmental standards.

" What did we experience while working with the PCF? Professionalism and dedication, excellent teamwork over time and land zones, and real commitment for the environment, which in their case is really as important as economic concerns. It may sound too nice, but that is true."

ANIKÓ POGÁNY

Director of Business Development, Pannonpower Hldg

" We have gained a lot of knowledge and know-how from the PCF and make use of this in our efforts to combat climate change. The most important thing to learn from the PCF, however, is the spirit of its motto 'Learning by Doing'."

CHUBU ELECTRIC COMPANY

PCF Participant

PROJECT:

CHILE—THE CHACABUQUITO HYDROELECTRIC PROJECT

FROM PLANNING TO RESULTS: THE PROJECT THAT HAS GENERATED THE FIRST VERIFIED EMISSION REDUCTIONS

The Chacabuquito run-of-river hydropower project, high in the Chilean Andes is delivering more than electricity. The project made history for the Prototype Carbon Fund, as the first PCF project to become operational, when it started generating electricity in July 2002. In 2001 the Norwegian firm Det Norske Veritas had validated the likely compliance of the project with modalities and procedures of the Clean Development Mechanism. In June 2003 the German firm TÜV Süddeutschland verified the first emission reductions from the project.

The Chacabuquito plant, near the little town of Los Andes, 100 kilometers northeast of Santiago, is a world away from Kyoto, where in 1997 representatives of 159 countries signed the Kyoto Protocol to reduce the greenhouse gases that cause climate change. The conference in Kyoto made the project possible when it established a Clean Development Mechanism, defining the rules under which the Chacabuquito Project receives financing from the PCF.

Chacabuquito's 26-megawatt, run-of-river plant near Los Andes is scheduled to deliver one million tons of emission reductions to PCF Participants. The project developer, a power company called Hidroelectrica Guardia Vieja S.A., will receive US$3.5 million in return. Concurrently with the PCF, Mitsubishi Corporation has independently contracted to purchase another 100,000 tons of greenhouse gas emission reductions. The project design was evaluated by two independent auditors.

" By selling emission reductions to developed countries, Chile is entering fully the international market of environmental cleansing. That will enable the national private sector to access resources to improve their technologies and introduce clean technologies. Throughout the world, and especially in Europe, there is growing demand for these type of emission reductions. This opens great possibilities for Chile, a country with low risk rating for investments, compared with other similar nations. Chacabuquito is the first success story."

GIANNI LÓPEZ RAMIREZ

Executive Director, of Chile's CONAMA, the National Commission for Environment.

" As a further contribution through the PCF, Mitsubishi has purchased carbon dioxide emission reductions from the Chacabuquito project. This is the world's first case of what is known in the business as a 'parallel purchase', which supplements the PCF and helps improve the viability of projects. Under this scheme, Mitsubishi bought 100,000 tons worth of carbon dioxide emission reductions from the same project in parallel with the PCF. This project has a high potential of being recognized as a Clean Development Mechanism project under the Kyoto Protocol."

MITSUBISHI CORPORATION

PCF Participant

" On behalf of the management of HGV, I thank the PCF for its support for this project which without doubt serves as an example for the rest of the world. Let us hope it will be the catalyst that will finally allow the Kyoto Protocol to enter into force. The PCF and other stakeholders should feel proud of this achievement—that the efforts undertaken in Kyoto, Bonn, Morocco, South Africa, and now in the Andes, Chile, finally are a visible, concrete and above all, verifiable reality in accordance with the Clean Development Mechanism"

FERNANDO CUBILLOS

Commercial Director, Hidroelectrica Guardia Vieja (HGV)

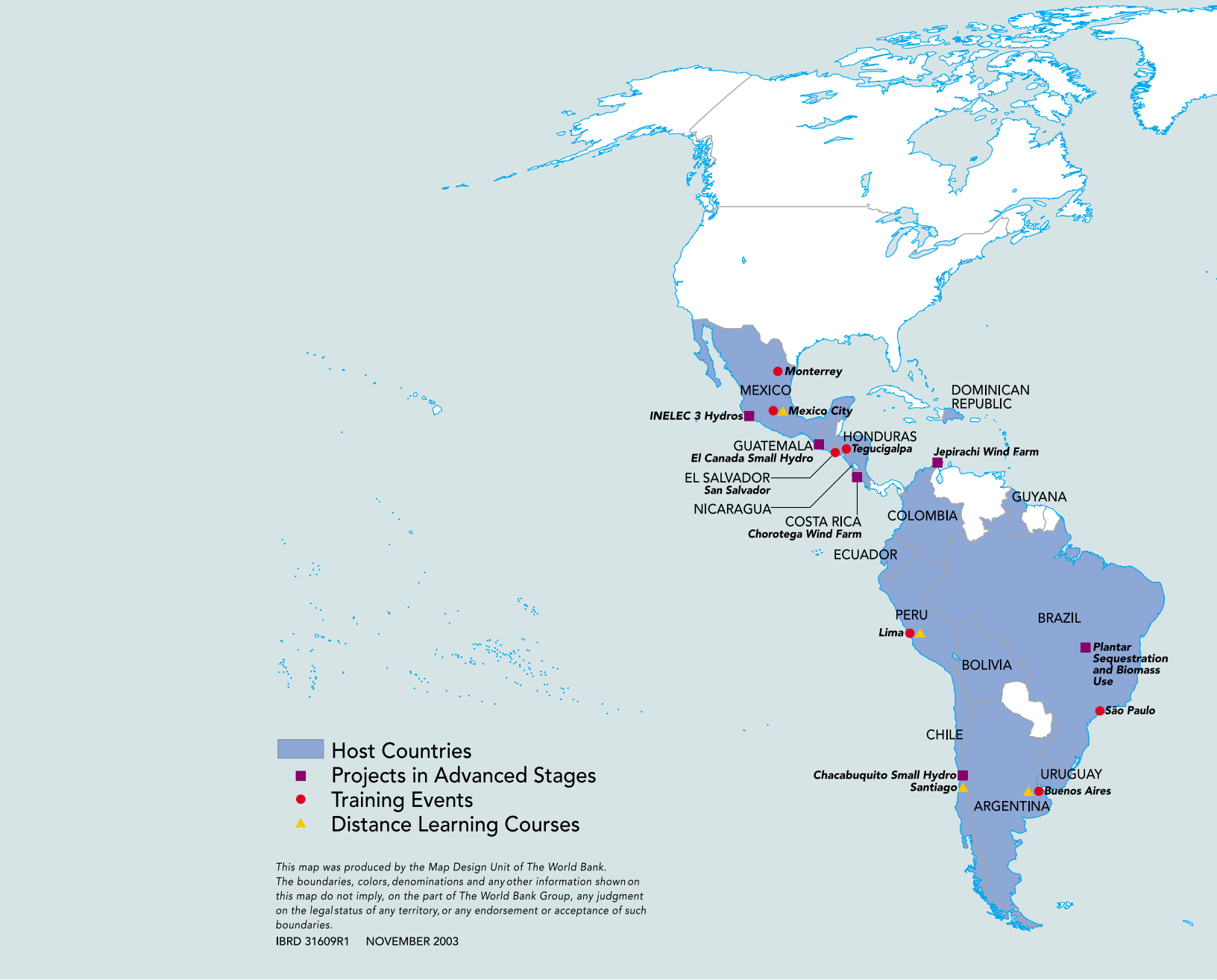
A POWERFUL DEVELOPMENT TOOL FOR LATIN AMERICA

The Chacabuquito Project will be connected to a regional subsystem within the central system that accounts for about three-quarters of Chile's power generation. The project will generate power for industrial and residential consumers in the region. It will help to replace the coal that currently provides 25% of the region's power and causes pollution. Local people will be employed at the plant and roads and bridges built to service it will provide new access to small villages in the area.

Carbon finance was instrumental in the developer's decision to proceed with the project, even through carbon funds only cover a small part of the project's cost of US$37 million.

Chacabuquito is a model which shows how carbon finance opens new possibilities for Chile and other developing countries to implement renewable energy projects. The project demonstrates the potential and value of the Clean Development Mechanism as a powerful development tool for Latin America.

HOST COUNTRIES, PROJECT PIPELINE AND TRAINING



This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

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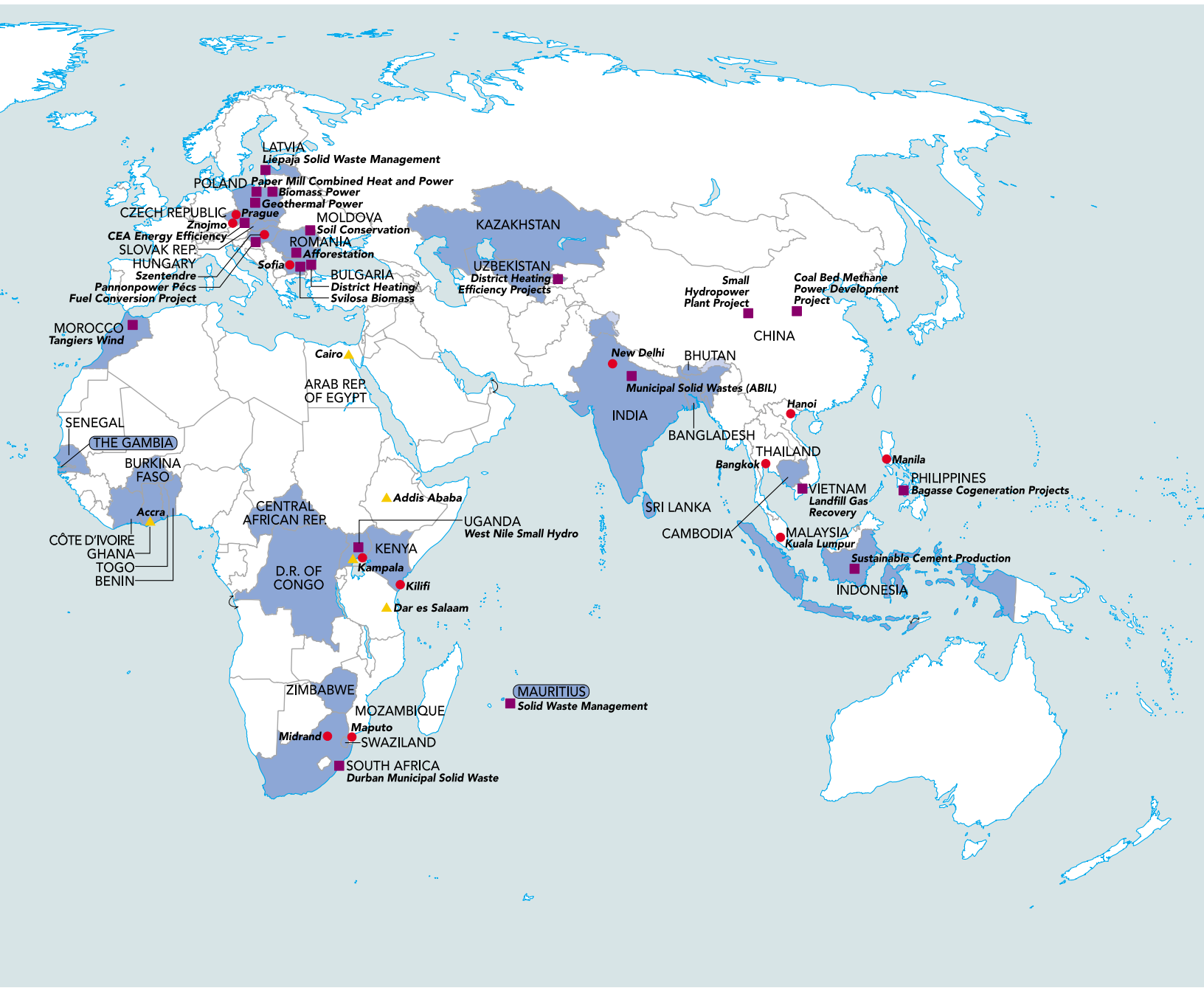
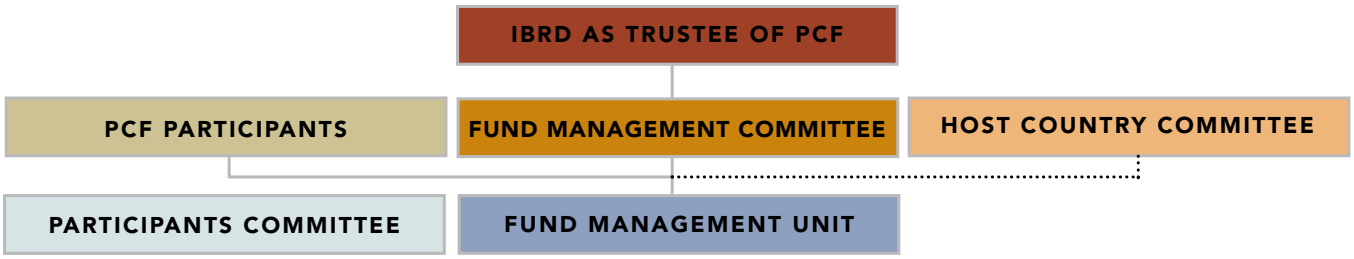


" The PCF brings together a group of dedicated, forward-looking companies and governments which are committed to building the carbon market and to furthering the cause of sustainable development. Rabobank considers it a privilege to be a part of that group."

RABOBANK

PCF Participant

PCF GOVERNANCE



FUND MANAGEMENT COMMITTEE

Members of the Fund Management Committee are drawn from the entire World Bank.

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Susan G. Goldmark
Sector Manager, Energy Cluster (LCSFE)
Henk Busz
Sector Manager, Infrastructure & Energy Services Department (ECSIE)
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PCF PARTICIPANTS

Governments

Government of Canada
Government of Finland
Japan Bank for International Cooperation
Government of The Netherlands
Government of Norway
Government of Sweden

Corporations

British Petroleum, United Kingdom
Chubu Electric Power Co., Inc. Japan
Chugoku Electric Power Co., Inc. Japan
Deutsche Bank, Germany
Electrabel, Belgium
Fortum, Finland
Gaz de France, France
Kyushu Electric Power Co., Inc. Japan
Mitsubishi Corp., Japan
Mitsui & Co. Ltd., Japan
Norsk Hydro, Norway
Rabobank, The Netherlands
RWE, Germany
Shikoku Electric Power Co., Inc., Japan
Statoil, Norway
Tohoku Electric Power Co., Inc. Japan
Tokyo Electric Power Co., Japan








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INDEPENDENT AUDITORS' REPORT

To: International Bank for Reconstruction & Development
as Trustee for the Prototype Carbon Fund

We have audited the accompanying balance sheets for the Prototype Carbon Fund for which the International Bank for Reconstruction and Development (IBRD) acts as Trustee and Administrator, as of June 30, 2003 and June 30, 2002 and the related statements of income (loss), changes in equity and cash flows for the years then ended. These financial statements are the responsibility of IBRD's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and International Standards on Auditing. Those standards require that we plan and perform our audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such financial statements present fairly, in all material respects, the financial position of the Prototype Carbon Fund as administered by the International Bank for Reconstruction and Development at June 30, 2003 and June 30, 2002, and the results of its operations and its cash flows for the years then ended in conformity with International Financial Reporting Standards.

As discussed in Notes 6 and 7 to the financial statements, Emission Reductions and Options to Purchase Emission Reductions are stated at fair value. Management of the Fund has estimated the fair values of Emission Reductions and Options to Purchase Emission Reductions in the absence of readily ascertainable market values. These values may differ from the values that would have been used had a ready market for Emission Reductions and Options to Purchase Emission Reductions existed, and the differences could be material.

Deloitte Touche Tohmatsu (International Firm)

September 26, 2003

PROTOTYPE CARBON FUND: BALANCE SHEETS

AS OF JUNE 30, 2003 AND 2002

Expressed in U.S. dollars

	June 30, 2003	June 30, 2002
ASSETS		
Equity in pooled investments	$ 7,925,852	$ 14,391,580
Investment income receivable	43,378	62,509
Receivable from other trust funds (Note 3)	28,202,154	21,405,610
Emission reductions (Note 6)	355,320	-
Option to purchase emission reductions (Note 7)	562,500	-
Advance payments for emission reductions (Note 8)	595,000	595,000
Valuation allowance for advance payments (Note 8)	-	(595,000)
TOTAL ASSETS	**$ 37,684,204**	**$ 35,859,699**
LIABILITIES AND EQUITY		
LIABILITIES:		
Accrued fund development expenses	$ 400,000	$ 930,000
Accrued project development expenses	-	193,000
Accrued project-related expenses	68,000	-
Accrued administrative expenses	22,769	178,281
Accrued performance-linked expenses (Note 4)	100,000	140,000
Total liabilities	590,769	1,441,281
EQUITY:		
Capital contributions pledged	180,000,000	145,000,000
Notes receivable on capital contributions	(130,613,786)	(102,117,990)
Capital contributions paid in (Note 1)	49,386,214	42,882,010
Retained deficit	(12,292,779)	(8,463,592)
Total equity	37,093,435	34,418,418
TOTAL LIABILITIES AND EQUITY	**$ 37,684,204**	**$ 35,859,699**

PROTOTYPE CARBON FUND: STATEMENTS OF INCOME (LOSS)

FOR THE YEARS ENDED JUNE 30, 2003 AND 2002

Expressed in U.S. dollars

	July 1, 2002 to June 30, 2003	July 1, 2001 to June 30, 2002
REVENUE		
Investment income (Note 9)	$ 260,806	$ 930,606
Premium income	-	11,315
Total revenue	260,806	941,921
EXPENSES		
Net project-related expenses (Note 11)	2,428,815	2,977,619
Performance-linked expenses (Note 4)	100,000	90,000
Administrative expenses	1,470,021	1,661,089
Valuation allowance for advance payments (Note 8)	(595,000)	295,000
Investment income transfer (Note 10)	686,157	-
Total expenses	4,089,993	5,023,708
NET LOSS	**$ (3,829,187)**	**$ (4,081,787)**

See notes to financial statements

PROTOTYPE CARBON FUND: STATEMENTS OF CHANGES IN EQUITY

FOR THE YEARS ENDED JUNE 30, 2003 AND 2002

Expressed in U.S. dollars

FOR THE YEAR ENDED JUNE 30, 2002	Capital Contributions	Notes Receivable	Retained Deficit	Total Equity
BALANCE, JULY 1, 2001	$ 145,000,000	$ (109,137,677)	$ (4,381,805)	$ 31,480,518
CAPITAL CONTRIBUTIONS:				
Public sector participants	-	3,398,887	-	3,398,887
Private sector participants	-	3,620,800	-	3,620,800
Net loss	-	-	(4,081,787)	(4,081,787)
BALANCE, JUNE 30, 2002	**$ 145,000,000**	**$ (102,117,990)**	**$ (8,463,592)**	**$ 34,418,418**

FOR THE YEAR ENDED JUNE 30, 2003	Capital Contributions	Notes Receivable	Retained Deficit	Total Equity
BALANCE, JULY 1, 2002	$ 145,000,000	$ (102,117,990)	$ (8,463,592)	$ 34,418,418
CAPITAL CONTRIBUTIONS:				
Public sector participants	5,000,000	(2,028,356)	-	2,971,644
Private sector participants	30,000,000	(26,467,440)	-	3,532,560
Net loss	-	-	(3,829,187)	(3,829,187)
BALANCE, JUNE 30, 2003	**$ 180,000,000**	**$ (130,613,786)**	**$ (12,292,779)**	**$ 37,093,435**

PROTOTYPE CARBON FUND: STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED JUNE 30, 2003 AND 2002

Expressed in U.S. dollars

	July 1, 2002 to June 30, 2003	July 1, 2001 to June 30, 2002
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	$ (3,829,187)	$ (4,081,787)
Adjustments to reconcile net loss to net cash used in operating activities:		
Unrealized loss (gain) on pooled investments	157,303	(57,985)
Decrease in investment income receivable	19,131	91,644
Increase in receivable from other trust funds	(6,796,544)	(683,287)
Increase in emission reductions	(355,320)	-
Increase in option to purchase emission reductions	(562,500)	-
Increase in advance payments for emission reductions	-	(295,000)
(Decrease)/Increase in allowance for advance payments	(595,000)	295,000
Increase in accrued project-related expenses	68,000	-
(Decrease)/Increase in accrued administrative expenses	(155,512)	161,119
Decrease in accrued fund development expenses	(530,000)	(270,000)
Decrease in accrued project development expenses	(193,000)	-
(Decrease)/Increase in accrued performance-linked expenses	(40,000)	50,000
Net cash used in operating activities	(12,812,629)	(4,790,296)
CASH FLOWS FROM INVESTING ACTIVITIES		
Sales/(Purchases) of securities	6,308,425	(2,229,391)
Net cash provided/(used) in investing activities	6,308,425	(2,229,391)
CASH FLOWS FROM FINANCING ACTIVITIES		
Capital contributions	6,504,204	7,019,687
Net cash provided by financing activities	6,504,204	7,019,687
NET INCREASE IN CASH	-	-
CASH, BEGINNING OF PERIOD	-	-
CASH, END OF PERIOD	**$ -**	**$ -**

See notes to financial statements

PROTOTYPE CARBON FUND: NOTES TO FINANCIAL STATEMENTS

JUNE 30, 2003

1. ORGANIZATION AND OPERATIONS

The Prototype Carbon Fund (the Fund) was established in 1999 by the International Bank for Reconstruction and Development (IBRD) as a mechanism to help countries reduce global concentrations of greenhouse gases (GHG) and thereby minimize the adverse impacts of climate change on developing countries. The operational principles of the Fund are: (1) to invest in projects that are intended to generate high-quality GHG emission reductions in developing countries and countries with economies in transition, (2) to endeavor to effect an equitable sharing between the Fund participants and the developing countries of any emission reductions and other benefits arising from such projects, and (3) to disseminate broadly the knowledge gained in the development of the Fund and the implementation of the projects.

The Fund is administered by the IBRD as Trustee. Pursuant to the Fund's governing document, the Trustee is authorized, among other things, to accept capital contributions to the Fund from the participants, invest the funds collected, and establish a committee responsible for overseeing the operations of the Fund (the Fund Management Committee).

There have been two closings of the Fund representing the deadline for entering into Participation Agreements. As of the First Closing of the Fund on April 20, 2000, six Public Sector Participants and 15 Private Sector Participants had purchased an interest in the Fund by signing Participation Agreements. As of the Second Closing of the Fund on October 31, 2000, two additional Private Sector Participants had entered into Participation Agreements. At the Third Annual Participants' Meeting, held in June 2002 at Zakopane, Poland, it was approved to increase the size of capital contributions to the Fund from $145 million to $180 million and ten of the Participants entered into Supplementary Participation Agreements to purchase an additional interest in the Fund. Participants provide their contributions either through the delivery of an unconditional promissory note made payable to the Trustee upon demand, or through advance payments to separate holding trust fund accounts managed by IBRD as Trustee. As the Trustee establishes the need for cash on an annual basis and requests cash payments from the Participants, the outstanding balances of promissory notes are reduced by the corresponding amounts received from the Participants. As of June 30, 2003 and 2002, capital contributions paid in cash by the Participants, are as follows:

Expressed in U.S. dollars

PUBLIC SECTOR PARTICIPANTS	Amounts paid as of June 30, 2003	Amounts paid as of June 30, 2002
Canada	$ 1,182,600	$ 1,182,600
Finland	1,182,600	1,182,600
Japan Bank for International Cooperation	1,182,600	1,182,600
Netherlands	1,771,400	1,182,600
Norway	1,182,600	1,182,600
Sweden	1,182,600	1,182,600
TOTAL PUBLIC SECTOR PARTICIPANTS	$ 7,684,400	$ 7,095,600

PRIVATE SECTOR PARTICIPANTS	Amounts paid as of June 30, 2003	Amounts paid as of June 30, 2002
BP Amoco	$ 586,300	$ 586,300
Chubu Electric Power Company Inc.	1,175,100	586,300
Chugoku Electric Power Company Inc.	821,580	586,300
Deutsche Bank (Note 3)	586,300	5,000,000
Electrabel	586,300	586,300
Fortum OYJ	704,060	586,300
Gilde Strategic Situations B. V.	586,300	586,300
Gaz de France	586,300	586,300
Kyushu Electric Power Company Inc.	939,580	586,300
MIT Carbon Fund	704,060	586,300
Mitsubishi	586,300	586,300
Norsk Hydro ASA	586,300	586,300
RWE Aktiengesellschaft	586,300	586,300
Shikoku	1,175,100	586,300
Statoil	1,175,100	586,300
Tohoku Electric Power Company Inc.	1,175,100	586,300
Tokyo Electric Power Company Inc.	939,580	586,300
TOTAL PRIVATE SECTOR PARTICIPANTS	**$ 13,499,660**	**$ 14,380,800**
TOTAL ALL PARTICIPANTS	**$ 21,184,060**	**$ 21,476,400**
Plus receivables from other trust funds	28,202,154	21,405,610
TOTAL CAPITAL CONTRIBUTIONS PAID IN	**$ 49,386,214**	**$ 42,882,010**

2. SUMMARY OF SIGNIFICANT ACCOUNTING AND RELATED POLICIES

Basis of Accounting - The accompanying financial statements are prepared in accordance with International Financial Reporting Standards. These financial statements are presented on a comparative basis for the years ended June 30, 2003 and 2002.

Use of Estimates - The preparation of financial statements in conformity with International Financial Reporting Standards includes estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from these estimates.

Cash - The Fund places the funds it receives from the Participants under International Bank for Reconstruction and Development (IBRD) investment management (see Equity in Pooled Investments).

Equity in Pooled Investments - Amounts paid into the Fund, but not yet disbursed, are managed by IBRD, which maintains a single investment portfolio (the Pool) for all of the trust funds administered by IBRD, the International Development Association (IDA), and the International Finance Corporation (IFC). Under the Pool's current investment strategy, a significant portion of the Pool is invested in liquid instruments such as U.S. Treasury securities and other high-grade bonds.

IBRD maintains the investments on a pooled accounting basis: investment income is allocated to each trust fund on a pro-rata basis based on proportional fund balance at cost. Equity in pooled investments represents the Fund's pro-rata portion of the Pool's market value at the end of the period. The corresponding pro-rata realized and unrealized gains or losses accrue to the Fund in the period in which they occur.

Capital Contributions - The Fund derives its funding from contributions provided by its Participants. Each Participant's contribution is recorded in full as Capital Contributions Pledged upon execution of a Participation Agreement between the Participant and the Fund. Amounts not yet paid in are recorded as Notes Receivable on Capital Contributions and shown as a reduction of Capital Contributions Pledged on the balance sheet. The notes receivable are settled through cash payments upon the Trustee's request, in accordance with an annual budget and business plan approved by the Participants.

Emission Reductions - The Fund enters into executory contracts (i.e., firm commitments) with external parties for the purchase of emission reductions (ERs). Upon delivery of verified ERs by such external parties, the Fund records them on the balance sheet as assets that are measured at fair value at the end of the reporting period.

Option to Purchase Emission Reductions - The Fund enters into agreements with external parties to purchase ERs. Some purchase agreements contain provisions which provide options for the Fund to purchase additional ERs generated by the projects. Options to purchase emission reductions are deemed to be derivative instruments accounted for under International Accounting Standard (IAS) 39, Financial Instruments: Recognition and Measurement, and are measured at fair value at the end of the reporting period.

Advance Payments for Emission Reductions - The Fund enters into agreements for the purchase of ERs with external parties. In some instances, the purchase agreements contain provisions for the Fund to pay for ERs prior to their delivery. Such prepayments are recorded by the Fund in the balance sheet as Advance Payments for Emission Reductions. The amounts accumulated in the Advance Payments for Emission Reductions account will be reclassified to Emission Reductions on the balance sheet when qualifying ERs are delivered to the Fund.

Premium Income - Participants who enter into Participation Agreements after the First Closing pay the Fund a premium in an amount equal to 2.5% of their required annual contributions. The premium payments are not taken into account in determining the Participants' interests in the Fund, or in the calculation of the size of the Fund. Income from premiums is recognized in the statement of income (loss) as earned.

Fund and Project Development Expenses - The Fund will reimburse the Trustee for 80% of all costs and expenses incurred by the Trustee prior to the First Closing in relation to the development of the Fund, not to exceed $2 million, which is to be paid in five equal annual installments. In addition to these amounts, the Fund will also reimburse the Trustee for all costs and expenses incurred by the Trustee prior to the First Closing of the Fund in relation to the identification, preparation, and appraisal of proposed projects. No new fund and project development expenses were incurred in fiscal years ended June 30, 2003 and 2002.

Administrative Expenses - The Fund reimburses the Trustee for all costs and expenses incurred in the administration of the Fund. These include salaries and benefits, contracted services, marketing, communications, audits and reporting, and overhead. Administrative expenses are recognized when incurred.

Project-Related Expenses - The Fund will reimburse the Trustee for all costs incurred during each project's preparation, including project negotiation and validation costs. The Fund will absorb the expenses that are associated with each project's supervision and verification of ERs. Project expenses are recognized when incurred.

3. RECEIVABLE FROM OTHER TRUST FUNDS

Certain Participants have elected to deposit all or part of their contribution in holding accounts established as separate trust funds. These trust funds are also administered by IBRD. As contributions become due, at the request of the Trustee, funds will be transferred from those holding accounts into the Fund. In August 2002, a holding account was established for the contributions from the Deutsche Bank and the amount of $4,413,700 was transferred from the Fund into this holding account.

As of June 30, 2003, four holding accounts set up by Canada, Finland, Sweden and Deutsche Bank had contribution balances (less contributions already transferred to the Fund) of $8,817,400, $8,554,189, $6,416,865, and $4,413,700, respectively. As of June 30, 2002, the amounts in these holding accounts were $8,817,400, $8,197,772, and $4,390,438 for Canada, Finland, and Sweden, respectively.

4. PERFORMANCE-LINKED EXPENSES AND CONTINGENT LIABILITY

During each of the first ten years of the Fund's operations, the Trustee may be entitled to receive a performance-linked payment of up to $100,000, payable annually upon the approval of the Participants at the annual Participants' meeting. The Participants had authorized transfers of $100,000 and $90,000 for the fiscal years ended June 30, 2003 and 2002, respectively, from the Fund to the Trustee as performance-linked payments. The amount of future payments can not be reasonably estimated.

5. FIRM COMMITMENTS

As of June 30, 2003, the Fund has entered into executory contracts (i.e., firm commitments) with external parties to purchase ERs in the total amount of $19,498,730. As of June 30, 2002, the amount of signed firm commitments was $5,977,000. When verified ERs are delivered to the Fund by

such external parties, the Fund records them on the balance sheet as assets that are measured at fair value at the end of the reporting period (Note 6). In addition, under the provisions of some contracts, the Fund is entitled to purchase a share of any additional ERs over the annual minimum required. The future volume of such ERs can not be reasonably estimated.

6. EMISSION REDUCTIONS

As of June 30, 2003, the Fund paid $355,320 for the verified ERs from Hidroelectrica Guardia Vieja S.A. These ERs are not currently certified emission reductions (CER) under the Clean Development Mechanism (CDM).

Due to the evolving nature of international and national climate change and emission trading regulatory and policy regimes, as well as the emerging nature of the current market for ERs, presently, there is no single standard for determining fair value of ERs. Therefore, determining fair value requires that judgment be applied to the specific facts and circumstances of ERs in our portfolio while employing a consistently applied valuation process. Hence, Fund management has determined that as of June 30, 2003, the best estimate of fair value of these ERs approximates consideration given for them by the Fund, which is equal to the amount of $355,320. Because of the inherent uncertainty of determining the fair value of ERs, the fair value determined in good faith by management may differ from the values that would have been used had a ready market existed for the ERs, and the differences could be material. Management intends to closely monitor market conditions and revise this valuation as appropriate.

7. OPTION TO PURCHASE EMISSION REDUCTIONS

In November 2002, the Fund paid $562,500 for the option to purchase ERs over and above the firm commitment under the contract from Hidroelectrica Guardia Vieja S.A. The option may be exercised, in whole or in part, on or before December 31, 2010. Options to purchase emission reductions are deemed to be derivative instruments accounted for under IAS 39, Financial Instruments: Recognition and Measurement, and are measured at fair value at the end of the reporting period.

Due to the evolving nature of international and national climate change and emission trading regulatory and policy regimes, as well as the emerging nature of the current market for ERs, presently, there is no single standard for determining fair value of this option. Therefore, determining fair value requires that judgment be applied to the specific facts and circumstances of the option in our portfolio while employing a consistently applied valuation process. Hence, Fund management has determined that as of June 30, 2003, the best estimate of fair value of such option approximates consideration given for it by the Fund, which is equal to the amount of $562,500. Because of the inherent uncertainty of determining the fair value of the option, the fair value determined in good faith by management may differ from the values that would have been used had a ready market existed for the option, and the differences could be material. Management intends to closely monitor market conditions and revise this valuation as appropriate.

8. ADVANCE PAYMENTS FOR EMISSION REDUCTIONS

In December 2000, the Fund entered into an executory contract with the Republic of Latvia for the purchase of ERs in the amount of $2,477,000. Under this contract, the Fund pays for most of the ERs in installments over 6 years and will make a final payment in fiscal year 2013 with the first delivery of verified ERs expected in calendar year 2004. The Fund is also contractually entitled to a share of any additional ERs over the annual minimum required. As of June 30, 2003, the Fund has made advance payments of $595,000 to the Republic of Latvia under this contract.

Due to significant uncertainties surrounding the quantities and value of ERs for which the advance payments of $595,000 had been made, prior to fiscal year 2003 a 100% valuation allowance had been established. In fiscal year 2003, management re-assessed the allowance and determined that such allowance is no longer required.

9. INVESTMENT INCOME

Investment income consists of both realized and unrealized gains or losses incurred during the respective fiscal years. For the years ended June 30, 2003 and 2002, the unrealized investment loss is $157,303 and the unrealized investment gain is $57,985, respectively. For the years ended June 30, 2003 and 2002, the realized investment income is $418,109 and $872,621, respectively.

10. INVESTMENT INCOME TRANSFER

In accordance with the decision made by the Participants, in August 2002 a transfer of investment income was made from the Fund to a separate trust fund in the amount of $686,157 to be used for enhanced capacity building, training, and research activities. The amount represents investment income earned by Deutsche Bank's contributions while held in the Fund for the period from May 2000 to July 2002 (Note 3).

11.PROJECT-RELATED EXPENSES

For the fiscal year ended June 30, 2003, the net project-related expenses of $2,428,815 consist of project-related expenses in the amount of $2,508,553 net of reimbursements for preparation, supervision, and verification costs in the amount of $79,738 received from Hidroelectrica Guardia Vieja S.A. in accordance with the executory contract. No reimbursements were received in the fiscal year ended June 30, 2002.

GLOSSARY

Additionality: According to the Kyoto Protocol, gas emission reductions generated by Clean Development Mechanism and Joint Implementation project activities must be additional to those that otherwise would occur. Additionality is established when there is a positive difference between the emissions that occur in the baseline scenario, and the emissions that occur in the proposed project.

Afforestation: The process of establishing and growing forests on bare or cultivated land, which has not been forested in recent history.

Baseline: The emission of greenhouse gases that would occur without the contemplated policy intervention or project activity.

Biomass fuel: Combustible fuel composed of a biological material, for example, wood or wood by-products, rice husks, or cow dung.

Carbon asset: The potential of greenhouse gas emission reductions that a project is able to generate and sell.

Carbon finance: Resources provided to projects generating (or expected to generate) greenhouse gas (or carbon) emission reductions in the form of the purchase of such emission reductions.

Carbon dioxide equivalent (CO_2e): The universal unit of measurement used to indicate the global warming potential of each of the six greenhouse gases. Carbon dioxide—a naturally occurring gas that is a byproduct of burning fossil fuels and biomass, land-use changes, and other industrial processes—is the reference gas against which the other greenhouse gases are measured.

Certified Emission Reductions (CERs): A unit of greenhouse gas emission reductions issued pursuant to the Clean Development Mechanism of the Kyoto Protocol, and measured in metric tons of carbon dioxide equivalent.

Clean Development Mechanism (CDM): The mechanism provided by Article 12 of the Kyoto Protocol, designed to assist developing countries in achieving sustainable development by permitting industrialized countries to finance projects for reducing greenhouse gas emission in developing countries and receive credit for doing so.

Conference of Parties (COP): The meeting of parties to the United Nations Framework Convention on Climate Change.

Emission Reductions (ERs): The measurable reduction of release of greenhouse gases into the atmosphere from a specified activity or over a specified area, and a specified period of time.

Emission Reductions Purchase Agreement (ERPA): Agreement which governs the purchase and sale of emission reductions.

Emission Reduction Units (ERUs): A unit of emission reductions issued pursuant to Joint Implementation. This unit is equal to one metric ton of carbon dioxide equivalent.

Fund Management Committee: PCF Committee comprising five members, consisting of the Fund Manager and four other members of the management of the International Bank on Reconstruction and Development (IBRD) selected by the President of the IBRD. The Fund Management Committee is responsible for overseeing the operations of the Fund.

Fund Management Unit (FMU): Unit headed by the Fund Manager and responsible for the day-to-day operations of the Fund.

Greenhouse gases (GHGs): These are the gases released by human activity that are responsible for climate change and global warming. The six gases listed in Annex A of the Kyoto Protocol are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_20), as well as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

High quality emission reductions: Emission reductions of a sufficient quality so that, in the opinion of the Trustee, at the time a project is selected and designed, there will be a strong likelihood, to the extent it can be assessed, that PCF Participants may be able to apply their share of emission reductions for the purpose of satisfying the requirements of the UNFCCC, relevant international agreements, or applicable national legislation.

Host country: The country where an emission reduction project is physically located.

Internal rate of return: The annual return that would make the present value of future cash flows from an investment (including its residual market value) equal the current market price of the investment. In other words, the discount rate at which an investment has zero net present value.

Joint Implementation (JI): Mechanism provided by Article 6 of the Kyoto Protocol, whereby a country included in Annex I of the UNFCCC and the Kyoto Protocol may acquire Emission Reduction Units when it helps to finance projects that reduce net emissions in another industrialized country (including countries with economies in transition).

Kyoto Protocol: Adopted at the Third Conference of the Parties to the United Nations Convention on Climate Change held in Kyoto, Japan in December 1997, the Kyoto Protocol commits industrialized country signatories to reduce their greenhouse gas (or "carbon") emissions by an average of 5.2% compared with 1990 emissions, in the period 2008-2012.

Millennium Development Goals (MDGs): Commit the international community to an expanded vision of development, one that vigorously promotes human development as the key to sustaining social and economic progress in all countries, and recognizes the importance of creating a global partnership for development. The goals have been commonly accepted as a framework for measuring development progress.

Monitoring plan: A set of requirements for monitoring and verification of emission reductions achieved by a project.

Operational Entity: An independent entity, accredited by the CDM Executive Board, which validates CDM project activities, and verifies and certifies emission reductions generated by such projects.

Project Concept Note: A brief description of a project prepared by the project proponent entity or intermediary that is to be presented for consideration by the PCF's Fund Management Committee and the Participants' Committee.

Project Design Document: A project-specific document required under the CDM rules which will enable the Operational Entity to determine whether the project (i) has been approved by the parties involved in a project, (ii) would result in reductions of greenhouse gas emissions that are additional, (iii) has an appropriate baseline and monitoring plan.

Project Idea Note: A note prepared by a project proponent regarding a project proposed for PCF. The Project Idea Note is set forth in a format provided by the PCF and available on its website www.prototypecarbonfund.org.

Reforestation: This process increases the capacity of the land to sequester carbon by replanting forest biomass in areas where forests have been previously harvested.

Registration: The formal acceptance by the CDM Executive Board of a validated project as a CDM project activity.

Sequestration: Sequestration refers to capture of carbon dioxide in a manner that prevents it from being released into the atmosphere for a specified period of time.

United Nations Framework Convention on Climate Change (UNFCCC): The international legal framework adopted in June 1992 at the Rio Earth Summit to address climate change. It commits the Parties to the UNFCCC to stabilize human induced greenhouse gas emissions at levels that would prevent dangerous manmade interference with the climate system.

Validation: The assessment of a project's Project Design Document, which describes its design, including its baseline and monitoring plan, by an independent third party, before the implementation of the project against the requirements of the CDM,

Verification Report: A report prepared by an Operational Entity, or by another independent third party, pursuant to a Verification, which reports the findings of the Verification process, including the amount of reductions in emission of greenhouse gases that have been found to have been generated.

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