

CAN BUSINESS LEARN TO LOVE THE ENVIRONMENT? THE CASE FOR A U.S. CORPORATE CARBON FUND

Introduction

Unions of business and the environment are rarely happy ones. Environmental concerns are generally viewed by business interests as unwelcome intrusions and any marriage between the two is usually more in the nature of a shotgun wedding than a romance. A spate of such uneasy unions seems poised to occur in the face of increasing awareness in the US that global warming (the emission of greenhouse gases into the atmosphere) is a problem in need of immediate attention. This article proposes a means to make such unions more harmonious.

The United States' withdrawal from the Kyoto Protocol process in 2001 delayed but did not sound the death knell for controls on the greenhouse gas emissions of U.S. industry. Even whilst withdrawing the United States from that process, President Bush promised that the United States would provide its own plan to reduce global warming. Efforts to address global warming have been ongoing in the United States, on many different levels, ever since. Whilst the Administration has limited its efforts to urging U.S. industry to adopt voluntary measures to reduce their greenhouse gas emissions¹ there is a rapidly growing consensus that the introduction of mandatory controls on greenhouse gas

¹ As carbon dioxide is the most ubiquitous of the six greenhouse gases (which also include methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, sulphur hexafluoride), this translates into an obligation to reduce carbon dioxide emissions.

emissions is both necessary and inevitable. This consensus was captured in a May, 2005 *New York Times* editorial,

Hardly a week goes by without somebody telling President Bush that his passive approach to global warming is hopelessly behind the times and now he is hearing it from the heaviest hitters in the business world, most recently, Jeffrey Immelt, the Chief Executive of General Electric. Mr. Immelt believes mandatory controls on emissions of carbon dioxide, the main greenhouse gas, are necessary and inevitable. And he said he would double investments by G.E. in energy and environmental technologies to prepare it for what he sees as a huge global market for products that help other companies – and countries like China and India – reduce emissions of greenhouse gases.²

The consensus is likely to gain even greater momentum in the face of the devastating effects of Hurricanes Katrina and Rita, hurricanes which many attribute to the effects of global warming.

Whether the mandatory controls ultimately adopted come from international treaty or U.S. government regulation, compliance for U.S. corporations will be costly.

Conversely, large new markets await corporations that produce technologies that reduce emissions. The academic literature on mandatory controls has mainly focused on the pros and cons of such controls from an environmental law and policy standpoint. Less

² Editorial, *Talking Climate Signals*, N.Y. Times, May 19, 2005 at A26.

has been written on the impact of such controls from the perspective of corporate law and policy. This latter perspective is the focus of this article.

The article addresses the question of how and why U.S. corporations should prepare themselves for the added expense, or expanded market opportunities, as the case may be, that mandatory controls on greenhouse gas emissions will bring. Should corporations who will have to reduce their emissions, for example, do nothing until the shot gun is put to their heads? Should those who will benefit from a new domestic market for their products simply wait for that market to develop or position themselves now to gain experience and insight into the demands of that market?

.

U.S industry has already begun answering these questions. Many corporations which emit greenhouse gases are building systems to track and monitor their emissions and undertaking steps to achieve reductions. Others, who produce environmental technology, have begun mobilizing resources to take advantage of the opportunities presented outside the United States since the Kyoto Protocol began to take shape. These measures are important first steps but I argue that they contain a major omission because they are devoid of any concerted attempt on the part of U.S. corporations to prepare themselves to avail of the highly cost-effective means of achieving greenhouse gas emission reduction credits offered by investing in the developing world. As I explain below, I believe this omission is short-sighted.

My article starts from two premises. First, those mandatory controls on emissions will include the possibility of meeting the requirements of such controls by investing in energy efficient projects in developing countries which result in the reduction of emissions in those countries. (This is sanctioned under the Kyoto Protocol). My second starting premise is that achieving credit for the emission reductions that result from such investments will be a far less expensive means of meeting the obligations of mandatory controls than achieving such reductions by investments within the United States (as numerous assessments show). I argue that, in addition to the preparatory steps they are already taking, U.S. corporations should jointly create a new business enterprise, a U.S. corporate carbon fund that would fund environmentally friendly projects, or components of projects, and, therefore, the reduction of greenhouse gas emissions, in the developing world.

The enterprise I propose would be a trust fund capitalized by participating corporations and administered by the World Bank as trustee. It would be modeled on the Prototype Carbon Fund that was formed by the World Bank in 1999. The purpose of the fund would be to provide financing for projects in less developed countries to be used to cover the costs of making those projects more environmentally friendly than they would otherwise be (for example, the fund could finance the additional cost of fitting a scrubber to a coal-fired plant). In return, the fund would receive credits for the reduction in the plant's carbon emissions brought about by the Fund's financing (in the example above, by the use of that scrubber). The trustee would distribute those credits (a/k/a "reductions") pro rata amongst the participants in the fund, in accordance with their

respective contributions. The participants, in turn, would use those reductions towards defrayment of their obligations to reduce greenhouse gas emission that will be imposed upon them upon the introduction of mandatory controls.

A U.S. corporate carbon fund would integrate environmental and business principles to address everyone's interest in clean air. The approach serves three specific business objectives. First, it would position U.S. corporations to prepare for mandatory greenhouse gas emission controls; everyone will have to reduce their emissions but the advantage will go to those corporations who achieve their reductions in the most cost-effective manner. Secondly, it would provide U.S. corporations with exposure to, and knowledge of, developing countries' needs for environmentally friendly technology. Thirdly, it would enable U.S. corporations to achieve the goal of corporate social responsibility by performing a positive role in addressing the problem of global warming. Moreover, by acting together through a fund, U.S. corporations would share the risks of project failure and collectively avail of the experience, ties and leverage with the developing world that acting through an international financial institution, such as the World Bank, can provide.

More broadly, the fund approach would render significant benefits to the developing world and serve as a useful precedent for other public-private sector interventions in international development aid. Such a precedent would be especially useful in light of increasing pressure on all developed country governments, including the United States, to expand their aid to developing countries and growing recognition on the part of such

governments that the private sector will need to play a role in responding to such pressures.³

The formation of such a fund will entail a novel integration of disparate legal principles that will prove challenging. Because our scientific understanding of global warming is changing, environmental law has had to remain dynamic. While not stagnant, corporate finance, trusts and securities law cover activities that are more settled and, hence, rather more resistant to change. Finally, the involvement of the private sector in a jointly-managed collaborative effort with the World Bank to target the provision of international development aid would raise unresolved issues concerning the boundaries of their respective domains. As the article illustrates, forging an alliance between these disparate areas of the law will involve pioneering the development of the law in all three of these areas. I contend that these areas of the law need to evolve and expand to integrate the new forms of rights and interests that mandatory controls on greenhouse gas emissions will entail and to address the pressing policy concerns that underpin this new regime.

Part 1 of the article examines the state of affairs leading to the imminence of mandatory U.S. controls on greenhouse gas emissions, in order to show the form they may take and, hence, the issues to which U.S. corporations will have to respond. It begins with a discussion of global warming, the emergence of an international regulatory regime to limit greenhouse gas emissions and the current status of federal, state and municipal

³ See generally, Jeffrey D. Sachs, *THE END OF POVERTY* (2005) and James D. Wolfensohn, *The Challenges of Globalization: The Role of the World Bank*. Address to the Bundestag, Berlin, Germany (April 2, 2001) (stating that development will only endure if it is comprehensive, long-term, and involve the participation of all sectors, including the private sector).

regulatory measures being undertaken in the United States. The article argues that, given the inefficiencies of either a purely governmental or market intervention, any U.S. mandatory controls should be modeled on the hybrid approach introduced under the Kyoto Protocol. In particular, such controls should permit U.S. corporations to meet part of their obligations to reduce their greenhouse gas emissions by investing in emissions reduction or preventive projects in developing countries.

Part 2 shows why a U.S. corporate carbon fund would be an effective means of preparing U.S. corporations to respond to mandatory controls and to avail of markets for new environmentally-friendly technologies. This part explains the elements of the Prototype Carbon Fund, on which I maintain a U.S. corporate carbon fund should be modeled, current voluntary measures being undertaken by U.S. corporations to monitor and limit their greenhouse gas emissions and how a U.S. corporate carbon fund would build upon and expand those efforts.

Part 3 analyzes the legal issues that forming a U.S. corporate carbon fund would present. It describes how the highly idiosyncratic governance structure required for such a fund would push the envelope of current principles of trust law and corporate governance. Further, it takes the nascent step of describing how the new property and other rights and interests implicit in mandatory controls would intersect with existing securities and tax law.

In conclusion, I maintain that a U.S. corporate carbon fund would more closely resemble an inter-faith union than a shot-gun marriage. It will involve forging an alliance between two very different credos; securities, trust and corporate finance on the one hand, and environmental principles on the other. But the fund would be a voluntary union, and many stand to benefit from its progeny; business, the environment and the developing world.

Part I

The Regulation of Global Warming

A. Global Warming Defined

Greenhouse gases are gases that trap heat in the stratosphere.⁴ While a certain amount of greenhouse gases naturally balance the earth's temperature and create the temperature hospitable to life on the planet, when excessive amounts of greenhouse gases become trapped in the atmosphere, the heat they generate gives rise to the warming effect commonly known as global warming. Certain human activities, such as the burning of fossil fuels produce greenhouse gases.⁵ The spread of such gases is also advanced by activities which denude the earth of natural barriers to the build up of such gases. The destruction of forests, for example, not only releases greenhouse gases through the

⁴ For more information on climate change, *see* the Pew Center on Global Climate Change website, at <http://www.pewclimate.org>. (last visited September 19, 2005).

⁵ United Nations Framework Convention on Climate Change, June 4, 1992, art. 1(5), 1771 UNTS 107, 31 I.L.M 849 [hereinafter UNFCCC]; *Global Warming Basics*, Basic Science, available at http://pewclimate.org/global-warming-basics/basic_science/ (last visited August 3, 2005);

burning or decomposition of trees but also contributes to the build up of greenhouse gases in the atmosphere by removing a natural mechanism for the absorption of carbon dioxide, the most ubiquitous greenhouse gas.⁶ The effects of global warming are felt worldwide and include, for example, rises in the sea level, with serious consequences for low-lying areas and island states; an increase in the range of tropical diseases, such as malaria and dengue fever; and marked changes in rainfall, resulting in increased desertification.⁷ Carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons, and sulphur hexafluoride are the six primary man-made greenhouse gases and these are now subject to governmental regulation at the international level and in some national and sub-national jurisdictions.⁸

B. The International Regulatory Response to Global Warming

The legal regulation of global warming occurs on an international and a national level. As a global problem, global warming must, necessarily be addressed by sovereign states, cooperating together under the rubric of an international convention⁹. As a problem which is caused in large part, however, by the activities of private actors within those states, any effort to address it must also include state action at a domestic level designed to regulate the activities of those actors within their borders. This multi-tiered assault on

⁶ *Id.*

⁷ *Id.*

⁸ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, Annex A, 37 I.L.M 22 [hereinafter “Kyoto Protocol”]; Available at <http://unfccc.int/cop4/kp.html> (last visited August 3, 2005)

⁹ See generally ROGER SCRUTON, THE NEED FOR NATIONS (CIVITAS 2004)

global warming has taken time to evolve to the level of mandatory international and national controls.

(i) The United Nations Framework Convention on Climate Change

The United Nations Framework Convention on Climate Change (hereinafter the “UNFCCC” or the “Convention”),¹⁰ which was concluded in New York on May 9, 1992, was the first international legal instrument to address global warming.¹¹ The basic objective of the UNFCCC is to reduce greenhouse gas emissions that accumulate in the atmosphere and cause warming beyond the natural greenhouse effect that is essential for life on earth.¹² The goal of the Convention, therefore, as set out in Article 2, is not to eliminate greenhouse gas emissions, but, rather to stabilize them “at a level that would prevent dangerous anthropogenic interference with the climate system.”¹³ Article 2 further provides that such stabilization should be achieved “within a timeframe sufficient to allow eco-systems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”¹⁴

¹⁰ See The United Nations Framework Convention on Climate Change (“UNFCCC”), U.N. Doc. Distr. General A/AC. 237/18 Part II/Add. 1.15 (May 1992). Also available at <http://unfccc.int/cop4/conv.html> (last visited August 3, 2005).

¹¹ The UNFCCC was opened for signature in June 1992 as a part of the UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil. It came into force on March 21, 1994 and now has 193 Parties.

¹² See Gary C. Bryner, *Carbon Markets: Reducing Greenhouse Gas Emissions Through Emissions Trading*, 17 TUL. ENVTL. L.J. 267, 267 n.1 (2004).

¹³ DAVID FREESTONE & CHARLOTTE STRECK, LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS : MAKING KYOTO WORK 4-5 (2005).

¹⁴ UNFCCC, *supra* note 10, art 2.

The UNFCCC created a framework within which signatories could work towards defining a regime for stabilizing worldwide concentrations of greenhouse gases. As part of that framework, the UNFCCC divides the Parties into three categories: (1) all Parties; (2) all industrialized country Parties (Annex 1 countries); and (3) all industrialized country Parties except those from the former Soviet bloc in a process of economic transition (“EIT countries”) (Annex 2 countries). The UNFCCC requires differing commitments from each category of Parties.¹⁵

All commitments of the Parties to the UNFCCC were largely hortatory in nature; no firm obligations, modalities or benchmarks for the reduction of greenhouse gas emissions were specified.¹⁶ All Annex 1 countries, however, undertook to adopt national policies and measures to reduce their greenhouse gas emissions.¹⁷ Further, the Convention established an institutional apparatus, with the Conference of the Parties (the “Conference of the Parties” or “COP”) as its “supreme body” to monitor and review the Convention’s implementation.¹⁸ The Conference of the Parties initiated the negotiation of the Kyoto Protocol to the UNFCCC (hereinafter the “Kyoto Protocol” or the “Protocol”), to establish concrete obligations pursuant to the Convention, agreed to at the third meeting of the Conference of the Parties (COP3), held in Kyoto on December 11, 1997.¹⁹

(ii) *The Kyoto Protocol*

¹⁵ UNFCCC, *supra* note 10, arts. 2 & 10.

¹⁶ FREESTONE & STRECK, *supra* note 13, at 5.

¹⁷ UNFCCC, *supra* note 10, Annex 1.

¹⁸ UNFCCC, *supra* note 10, Art. 7.

¹⁹ *The Negotiation of the Kyoto Protocol and its Rulebook*, available at http://unfccc.int/essential_background/kyoto_protocol/items/2830.php. (last visited August 3, 2005).

The Protocol established a timetable and firm targets by which Parties ratifying the Protocol must reduce their greenhouse gas emissions. Under the Protocol, all Annex 1 countries agreed to reduce their emissions of greenhouse gases by an average of 5% below their 1990 levels over a five-year commitment period, between 2008 and 2012.²⁰ For countries agreeing to make these reductions, delivering on those agreements means passing national legislation imposing mandatory controls on greenhouse gas emitting entities within their respective jurisdictions. Thus, a country's obligation to reduce its greenhouse gas emissions is passed on, through national legislation, to the pertinent private sector actors under its control.

A key tension in introducing mandatory controls on greenhouse gas emissions, whether on an international or a national level, is the need to balance between achieving reductions in greenhouse gas emissions on the one hand and avoiding over-burdening greenhouse gas emitting activities on the other to a point where the impact on the emitter's economy, or profits, as the case, may be would be unreasonably harmful. The framers of the Protocol aimed to strike this balance by including in the Protocol four mechanisms (the "Market Mechanisms") which give the Parties a variety of options to employ in achieving their required reductions. Further, in recognition of the fact that Parties ratifying the Protocol would pass on their obligations to greenhouse gas emitting

²⁰ Kyoto Protocol, *supra* note 9, art. 3 (this commitment period is expected to be followed by subsequent commitment periods and revised targets). *See also* FREESTONE & STRECK, *supra* note 13, at 10-11.

entities within their domain, such entities are also permitted to avail of the Market Mechanisms.²¹

The mechanisms are the Joint Implementation Mechanism (JI) provided for in Article 6 of the Protocol, the Clean Development Mechanism (CDM) provided for in Article 12, the Emissions Trading Mechanism provided for in Article 17 and the Economic Organization Bubble (the “EO Bubble”) provided for in Article 4.²² The common thread underlying all four mechanisms is that they allow a country (and, therefore, a greenhouse gas emitting entity in that country) to achieve greenhouse gas emission reductions by a means other than requiring that country or entity to alter its own operations. The rationale for allowing Parties to achieve their targets by utilizing the Market Mechanisms is that because global warming is a global problem, any reduction of greenhouse gases, wherever it occurs, contributes to the resolution of the problem.²³ In addition, the flexibility provided by the Market Mechanisms allows for the use of the least-cost avenues to reduce emissions, thereby enabling more cost-effective and rapid fulfillment of the Protocol’s requirements. The JI and CDM Mechanisms are the mechanisms which are pertinent to the proposal for a U.S. corporate carbon fund because they are the two mechanisms which allow an entity to obtain emission reductions through investing in projects in an EIT country or a developing country, as such a fund would do.²⁴

²¹ Although the language of Article 6 of the Protocol, which creates one of the Market Mechanisms, is framed in terms of Party-to-Party transactions, it has been interpreted to allow private sector entities to avail of such mechanism. Freestone & Streck at 12.

²² UNFCCC, *supra* note 10, Arts. 4, 6, 12 & 17.

²³ FREESTONE & STRECK, *supra* note 13, at 11.

²⁴ Unlike the JI and CDM mechanisms, the Emissions Trading and EO Bubble Mechanisms are not project-based. See Kyoto Protocol, *supra* note 9, art. 3, Annex B. The Emissions Trading Mechanism provides for the trading of (i) “Assigned Amounts” of each Party (defined under the Protocol as the quantity of greenhouse gases a Party is allowed to release into the global atmosphere, as calculated on a

Under the JI Mechanism, any Annex 1 country may transfer to, or acquire from, another Annex 1 country, reductions of greenhouse gas emissions, described under Article 6 of the Protocol as Emission Reduction Units (ERUs), achieved by project activities.²⁵ The key feature of this mechanism is that all the emission reductions need to be generated by an entity in one Annex 1 country investing in a specific project that reduces emissions in another Annex 1 country.²⁶

Under the Article 12 CDM mechanism, Annex 1 countries can invest in projects giving rise to emission reductions in non-Annex 1 countries, i.e. developing countries (none of which have obligations under the Protocol to reduce their greenhouse gas emissions). In order to ensure that Annex 1 countries and entities therein are only permitted to claim credit for those projects in developing countries which demonstrably reduce greenhouse gas emissions, Article 12 provides for the establishment of a supervisory structure, the Clean Development Mechanism Executive Board, which includes an emissions reduction

yearly basis), Kyoto Protocol, *supra* note 8, art. 17, (ii) parts of Assigned Amounts, (iii) Certified Emission Reductions and (iv) Emission Reduction Units amongst Annex 1 countries. *Id.* The EO Bubble Mechanism, allows a regional economic integration organization which is a Party to the Protocol (such as the European Union (the “EU”)) to adopt an EO-wide target or “bubble” which can then be apportioned amongst EO members in any manner the members choose. *Id.* art. 4. The EU has taken advantage of the EO Bubble Mechanism and has established an EU Emissions Trading Scheme, by which EU member states have each been given an overall emissions target and may trade EU Allowances (as defined by EU law) to meet their obligations. FREESTONE & STRECK, *supra* note 13, at [].

²⁵ These ERUs may be generated by any projects that reduce anthropogenic emissions of greenhouse gases or which enhance the anthropogenic removal of such gases by sinks (which are any processes, activities, or mechanisms, which remove greenhouse gases from the atmosphere).

²⁶ It is also subject to a number of further requirements. Kyoto Protocol, *supra* note 8, art. 6. Projects require approval of both the state parties acting as transferor and transferee, both of whom must be parties to the Protocol. *Id.* Further, the reduction of greenhouse gas emissions that take place as a result of the project must be additional to any that would otherwise have occurred (“additionality” is established by a “but for” test; but for the project the a particular benefit would not have happened). *Id.* No state can acquire ERUs if it is not itself in compliance with certain other requirements of the Protocol. *Id.* Finally, the acquisition of such ERUs cannot be a substitute for domestic action to reduce greenhouse gas emissions but, rather, must be supplemental to domestic actions. *Id.*

verification and certification system. Emission reductions certified through this system are termed Certified Emission Reductions (CERs) to distinguish them from ERUs, the product of Article 6 JI projects.²⁷ The Conference of the Parties has overarching responsibility for elaborating modalities and procedures for the operation of the CDM.

The Market Mechanisms are all required under the Protocol to be supplementary to domestic action on the part of the Parties to reduce greenhouse gas emissions in their territories.²⁸ However, they make the concrete obligations of the Protocol more palatable to the Parties and entities affected by the Protocol's obligations because they allow for the identification and use of the least costly measures to reduce greenhouse gas emissions. In the case of JI and CDM projects, there is a drastic difference in the cost of achieving greenhouse gas emission reductions by investing in a project in an EIT country or developing country, and the cost that would be incurred in achieving greenhouse gas emission reductions by retrofitting an existing operation or initiating a new project in a developed country.²⁹ In some cases, it is by one or two orders of magnitude cheaper to

²⁷ In a number of respects, however, CDM projects resemble JI projects. For example, projects must manifest real, measurable and long-term benefits relating to mitigation of climate change; and a project activity generating CERs must be "additional" to that which would have occurred in its absence. *See* Kyoto Protocol, *supra* note 8, art. 12(5)(c).

²⁸ FREESTONE & STRECK, *supra* note 13, at 272.

²⁹ FREESTONE & STRECK, *supra* note 13, at 11 (The theory behind the approach that emission reductions financed in other countries might be set off against the financier's greenhouse gas emissions reduction targets is that the "marginal abatement cost", i.e. the cost of financing an emission reduction, will usually be far higher in a relatively fuel efficient industrialized country than in an EIT country or a developing country which may have less efficient fuel-use technology. As the global climate system benefits from reductions wherever they are made, then making reductions in an EIT or a developing country as part of a national strategy (which also includes the introduction of domestic policies and measures to reduce emissions at home) will make the cost of reaching these reduction targets cheaper and increase the chances that they will actually be reached). *See also* A.D. Ellerman & A. Decaux, Sloan School of Management and Mass. Inst. of Tech., *Analysis of Post-Kyoto CO2 Emissions Trading Using Marginal Abatement Curves* (1998), available at http://web.mit.edu/afs/athena.mit.edu/org/g/globalchange/www/MITJPSPGC_Rpt40.pdf (last visited Apr. 15, 2005).

achieve a ton of greenhouse gas emission reductions in an EIT country or a developing country than to achieve such reductions in a developed country (Japan being the most costly country of all for these purposes).³⁰

The Kyoto Protocol went into effect on February 16, 2005. To enter into force, it required ratification by fifty five Parties to the UNFCCC, including ratification by Annex I parties “which accounted in total for at least 55 per cent of the total carbon dioxide emissions for 1990 of the Parties included in Annex 1.”³¹ Its effectiveness was delayed initially by heated and protracted negotiations between the Parties over the details of the Market Mechanisms³² and subsequently by the abrupt, and unexpected withdrawal by the United States of its support for the Protocol, following the ascension of the Bush Administration in the 2000 U.S. election.³³

³⁰See A.D. Ellerman & A. Decaux, Sloan School of Management and Mass. Inst. of Tech., *Analysis of Post-Kyoto CO2 Emissions Trading Using Marginal Abatement Curves* (1998), *supra* n. 29

³¹ Kyoto Protocol, *supra* note 8, art. 25(1).

³² FREESTONE & STRECK, *supra* note 13, at 8; DAVID HUNTER, JAMES SALZMAN, & DURWOOD ZAEKE, *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* 639 (2d ed. 2002). At the fourth meeting of the Conference of the Parties (COP4), held in Buenos Aires in November 1998, the Parties agreed that the deadline for reaching decision on the Mechanisms would be the sixth meeting of the Conference of the Parties (COP6), scheduled to be held in The Hague in November 2000. *Id.* In fact, the Hague meeting was a failure. FREESTONE & STRECK, *supra* note 13, at 8; The Parties encountered several roadblocks in their efforts to reach agreement on the modalities of the Market Mechanisms (such as, for example, the role that sink projects should play in Parties discharge of their obligations under the Protocol). *Id.* Moreover, the meeting was shrouded by the shadow of the uncertainty cast by the then- recent US election, the result of which was still the subject of controversy at the time of the Hague meeting. The US delegation went to the Hague not knowing whether Al Gore or George W. Bush would be the next President. Hunter, Salzman & Zaelke at 639. After the Hague meeting, an extra session of the COP was scheduled for July, 2001 in an effort to move things forward. Prior to that scheduled extra session, however, the Republicans ousted the Democrats in the 2000 US elections.

³³ Bryner, *supra* note 12, at 273. The result of the U.S. decision not to ratify the Protocol was that virtually all the other Annex 1 Parties, including the Russian Federation, would have to ratify the Protocol in order to bring it into force. Paradoxically, the U.S. action galvanized the remaining Parties to put aside their differences and at the seventh meeting of the COP, held in Marrakesh in November 2001, the Parties finally agreed upon a framework of guidelines, modalities and rules for implementing the Market Mechanisms. The Protocol subsequently entered into force when the Russian Federation ratified it on February 16 of this year. FREESTONE & STRECK, *supra* note 13, at 9;

C. The U.S. Regulatory Response to Global Warming

At the same time that President Bush announced that his Administration was withdrawing from the Kyoto Protocol, he promised to provide his own plan for reducing the threat of global warming³⁴ and efforts to address global warming have been ongoing on a number of different levels ever since. Consequently, U.S. corporations and other entities which emit greenhouse gases are faced today with the prospect of federal legislation imposing mandatory reductions and a myriad web of evolving state and city wide controls. At the federal level, Congress has considered a plethora of legislative proposals aimed at introducing greenhouse gas emissions reductions programs³⁵ while at a non-federal level, states and cities have taken a variety of proactive steps.³⁶

(i) Federal Initiatives

Shortly after announcing the withdrawal from Kyoto, the Bush Administration proposed to revamp the federal reporting requirement for carbon dioxide emissions, proposed \$4.6 billion in tax credits over five years as an incentive to reduce greenhouse gas emissions and set a goal of reducing the carbon intensity of the U.S. economy through voluntary measures.³⁷ This proposal never advanced but it was followed by a series of other legislative proposals aimed at introducing emission reductions programs.³⁸

³⁴ See Bryner, *supra* note 12, citing Andrew C. Revkin, *Bush Plans Expected to Slow, Not Halt, Gas Emissions Rise*, N.Y. Times, Feb. 14, 2001 at A1.

³⁵ See Bryner, *supra* note 12, at 274-275.

³⁶ See generally, US DEPARTMENT OF STATE, US CLIMATE ACTION REPORT 61 (2002) [hereinafter US CLIMATE ACTION REPORT], for examples of state and local initiatives.

³⁷ *Id.* at 64.

³⁸ Since President Bush proposed his environmental plans, Congress has taken the lead in introducing legislation. In the Senate, Senators McCain and Brownback introduced legislation in December 2001 to establish a national emissions registry and to establish credits from voluntary programs that could be used in any eventual mandatory emission reduction program. The following year, Senator Jim Jeffords

The most recent proposal is the “Climate Stewardship and Innovation Act of 2005,” which was introduced in the Senate on May 26, 2005 and is currently under review by the Senate Committee on Environment and Public Works.³⁹ The bill provides for the imposition of mandatory greenhouse gas emission reductions and for the establishment of an emissions registry, an emissions trading program and a climate research program.⁴⁰ The creation of a market-driven reduction of greenhouse gas emissions through the use of tradable emissions allowances is a key objective of the bill.⁴¹ Under the bill, the government would first distribute emissions allowances equal in number to an entity’s emissions limit for a given year.⁴² Starting in 2010, greenhouse gas emitting entities covered by the bill would then be required to submit to the U.S. Environmental Protection Agency (EPA) one such allowance for each ton of carbon dioxide, or the carbon dioxide equivalent of other greenhouse gases, it emits after introduction of the allowance program.⁴³ Such allowances could be bought and sold freely by anyone and allowances unused at the end of a year could be banked for use in a future year. The bill permits an entity to satisfy up to 15% of its total allowance submission requirement by

sponsored the Clean Power Act of 2002 that would have required power plants to reduce carbon dioxide by twenty-three percent and other emissions from current levels by 2008. Subsequently, Senator McCain and Lieberman introduced a greenhouse gas cap and trade bill that would have required sources to reduce their greenhouse gas emissions by 2010 to year 2000 levels and by 2016 to 1990 levels. Lastly, not to be outdone by the Senate, the House of Representatives introduced an energy bill that would impose mandatory controls on carbon dioxide emissions if sixty percent of American companies do not register voluntary reductions with the federal government during the next five years. None of these bills received the necessary votes to become enacted. *See Bryner supra* note 12, at 273-275. However, despite the lack of success, they gained progressive support as the McCain-Lieberman narrowly lost by a vote of fifty-five to forty three.

³⁹ S. 1151, 109th Cong. (2005) available at <http://thomas.loc.gov/cgi-bin/query/z?c109:S.1151>.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

submitting tradable allowances from another country's market in greenhouse gas emissions, provided such other national market meets certain qualifications.⁴⁴

(ii) Non-Federal Initiatives

Individual states have undertaken several different kinds of measures. Significantly, twenty eight states have completed comprehensive climate action plans which detail steps that the states can take to reduce their contributions to global warming.⁴⁵ Further, many states have established voluntary greenhouse gas emission registries.⁴⁶ Some states have introduced caps or offset requirements on emissions from fossil fuel power plants.⁴⁷ Other states have enacted legislation to curb greenhouse gas emissions resulting from transportation and/or agriculture and several states require that electric utilities generate a specified amount of electricity from renewable energy sources.⁴⁸ Twenty three states have established Public Benefit Funds to support energy efficiency and renewable energy projects.⁴⁹ In addition, eleven states in the Northeastern and mid-Atlantic region have launched a multi-state initiative⁵⁰ to reduce carbon dioxide emissions, with the objective of developing a regional strategy for controlling emissions.⁵¹

⁴⁴ *Id.* The US Secretary for the Environment must have determined that such other country's system for trading in greenhouse gas emissions is complete, accurate and transparent and such other nation must have adopted enforceable limits on its greenhouse gas emissions which the tradable allowances were issued to implement. *Id.* Further, the entity seeking to use such allowances must certify that the allowances have been retired, unused, in the other country's market. *Id.*

⁴⁵ See US CLIMATE ACTION REPORT, *supra* note 36. For example, Massachusetts has imposed a cap on emissions from fossil fuel power plants at approximately 10% below 1997-99 levels, to be achieved between 2006 and 2008. Further, Washington requires new power plants to offset approximately 20% of anticipated carbon emissions. *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ Such funds are funded by assessing a charge on electricity customers' utility bills or by requiring specified contributions from utilities. *Id.*

⁵⁰ The Regional Greenhouse Gas Initiative, see www.rggi.org/stakeholder_member.htm (last visited August 4, 2005); See also Dan Worth, *Accelerating Towards Climate Neutrality With The U.S. Government Stuck*

An increasing number of municipalities are committing to serious emission reductions that meet, and in some cases, surpass the targets set in the Kyoto Protocol.⁵² On June 13, 2005, the U.S. Conference of Mayors, representing 1,183 cities, voted unanimously to support the Climate Protection Agreement sponsored by Seattle Mayor, Greg Nickels.⁵³ This agreement adopts as its goal the achievement of the same level of greenhouse gas emission reductions as would be required of the U.S. were it to ratify the Kyoto Protocol; specifically to reduce U.S. greenhouse gas emissions by 7% below their 1990 levels by 2012. In adopting this agreement, mayors committed that their cities would aim to meet this goal and urged the state and federal governments to adopt policies establishing a similar target.⁵⁴

iii. Incorporation of Kyoto-style Project-based Mechanisms

As indicated above, to date, efforts in the U.S. to regulate greenhouse gas emissions have focused primarily on creating an infrastructure for measuring and recording emissions reductions, testing various forms of mandatory controls and developing a system to cap and trade greenhouse gas emissions. As the adoption of mandatory controls becomes

in Neutral: The Emerging Role of U.S. Businesses, Cities, States, and Universities in Aggressively Reducing Greenhouse Gas Emissions. 5 SUSTAINABLE DEVELOPMENT LAW & POLICY 4, 4-8 (Spring 2005).

⁵¹ *Id.* The plan, which focuses on limiting emissions from electric power generators, includes a cap-and-trade program with a market-based emission trading system.

⁵² Worth, *supra* note 50, at 6.

⁵³ See Worth, *supra* note 50, n.47 (citing *Seattle dreams of "green" team: Mayor urging other US cities to enact Kyoto Protocol*, SEATTLE POST-INTELLIGENCER, Feb. 17, 2005, available at http://seattlepi.nwsource.com/local/212425_kyoto17.html?search-pagefrom=1&searchdiff=59 (last visited August 4, 2005)).

⁵⁴ *Id.*

increasingly imminent, however, it will be vital for increased attention to be paid to the issue of how new emission reductions can be generated.

If, instead of continuing to pursue its own plan, the U.S. goes ahead and ratifies the Kyoto Protocol, any federal legislation to regulate greenhouse gas emissions would most likely track the rules established by the Protocol. Accordingly, it would be highly likely that any cap and trade framework introduced by such legislation would allow for recognition of emission reductions generated pursuant to the Protocol's Market Mechanisms. If, however, as seems increasingly likely, the U.S. does not ratify the Protocol but formalizes its own plan,⁵⁵ then there is every reason to expect (and for U.S. entities to urge) that such a plan should include a process that permits U.S. entities to achieve emission reduction credits that can be used to meet at least a portion of their obligations through mechanisms that are similar to the Protocol's project-based mechanisms (the JI and CDM Mechanisms). The U.S.' objections to the Protocol do not center on the Market Mechanisms' inclusion in the Protocol.⁵⁶ To the contrary, the tools of the Protocol borrow from a mechanism created by the U.S. in the early 1990's to deal with the problem of acid rain.⁵⁷ Moreover, excluding similar mechanisms would

⁵⁵ See Press Release, The White House, President and Danish Minister Rasmussen Discuss G8, Africa (July 6, 2005) (advancing an alternative plan to Kyoto where the United States and the world can work together to share technologies and control greenhouse gases as best as possible without destroying the United States' economy).

⁵⁶ Some key objections to the Protocol include: criticisms that the Protocol is ineffective in addressing climate change because it does not include developing countries; the potential for economic harm to United States and global economies; and the fear that the Protocol will subvert US sovereignty, leaving the US dependent on other countries to meet its emissions targets. See David A. Wirth, *Current Development: The Sixth Session (Part Two) and Seventh Session of the Conference of the Parties to the Framework Convention on Climate Change*, 96 A.J.I.L. 648, 657 (2002).

⁵⁷ See Jonathan Baert Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 Yale L.J. 677, 765-66 (1999) (noting the assignment of extra tradeable allowances to Midwestern electric utilities as part of the 1990 Clean Air Act).

needlessly deprive the U.S., U.S. entities and the developing world of the opportunity to pursue the kind of win/win collaborations that such mechanisms allow.

As discussed in Part II below, the Prototype Carbon Fund and the additional carbon funds formed in its wake pave the way for the effective use of project-based mechanisms like the JI and CDM Mechanisms. Given the probable inclusion of similar mechanisms in the U.S. system of mandatory controls that is ultimately adopted, a U.S. corporate fund, modeled on those funds would give U.S. entities a valuable head start.

Part II

A U.S. Corporate Carbon Trust Fund as a New Voluntary Venture

The Prototype Carbon Fund was established by a group of participants who found themselves in a situation very similar to that faced by US corporations and other entities today. Long before the Kyoto Protocol came into force, Parties, and entities likely to be affected there under, were interested in taking measures to prepare themselves for the implementation of the Protocol's provisions. From the time when it was negotiated, it was clear that the Protocol would spawn a new universe of obligations and opportunities once it went into effect. Mandatory controls on the emission of greenhouse gases were going to become part of the landscape and the most cost-effective way of complying with them was going to involve the use of the Market Mechanisms. Thus, Parties and likely-affected entities began exploring possibilities for positioning themselves to prepare to meet their obligations and, in particular, to use the Market Mechanisms, in preparation

for the Protocol's entry into force.⁵⁸ The Prototype Carbon Fund grew out of such preparations.

A. The Role and Purpose of the Prototype Carbon Fund

The governmental and corporate participants in the Prototype Carbon Fund, together with the World Bank, created the fund to pioneer implementation of the Protocol's project-based mechanism, the JI and CDM Mechanisms.⁵⁹ The enormous potential these mechanisms offered to create win/win collaborations between the public and private sector in the developed world, on the one hand, and EIT countries and developing countries, on the other, prompted immediate interest. Thus, these mechanisms gave rise to a pool of government and private sector entities on the lookout for opportunities to invest in projects in developing and EIT countries that would provide a cost-effective means of generating emission reduction credits. These individual companies and governments were not ideally placed to negotiate one on one with developing countries and EIT countries the mechanics of individual JI and CDM projects. The transaction costs and risks created barriers potentially significant enough to render the Market Mechanisms impractical and irrelevant. By proceeding in concert, however, as co-participants in a joint fund with the World Bank serving as intermediary between the developed and the developing world as trustee, the transaction costs and investment risks

⁵⁸ See Bryner, *supra* note 10, at 279-286 (noting that the Canadian, Danish, Dutch, and British governments launched national policies to begin to bring them into compliance with the Protocol's provisions).

⁵⁹ Prototype Carbon Fund Legal Instrument, [hereinafter "PCF Instrument"]; *available at* <http://carbonfinance.org/pcf/Router.cfm?Page=DocLib&Dtype=25&ActionType=ListItems> (last visited August 4, 2005).

could be reduced significantly. Ultimately, fifteen corporations and six governments joined as participants in the Prototype Carbon Fund.⁶⁰

The role of the Prototype Carbon Fund, therefore, was to serve as a central fund, managed by the World Bank as trustee that would finance JI and CDM projects. The idea was that the World Bank, with its extensive ties to the developing world and experience in dealing with projects there, would be the ideal honest broker between that world and the participants.⁶¹ For its part, the World Bank was interested in serving as trustee of the fund because of the huge potential JI and CDM projects offered to increase investment in developing countries and EIT countries, and to effect the transfer of environmentally friendly technology to such countries on an unprecedented scale, two objectives which lie at the heart of the World Bank's mandate.⁶²

The basic concept of the Prototype Carbon Fund, and the eight funds that have been formed in its wake, is remarkably simple.⁶³ The World Bank, as trustee, collects funds from the public and private sector participants and uses the pooled funds to purchase the greenhouse gas emission reductions generated by energy and/or forestry projects in

⁶⁰ The six governments are Finland, Norway, Sweden, the Netherlands, Canada, and Japan Bank for International Cooperation; and the fifteen companies who participated in the first closing of the Fund were, British Petroleum-Amoco, Chubu Electric Power Co., Chugoku Electric Power Co., Deutsche Bank, Electrabel/Suez-Lyonaise des Eaux, Gaz de France, Norsk Hydro, R.W.E., Statoil, and eight Japanese companies, including Chubu Electric Power Co., Chugoku Electric Power Co., Kyushu Electric Power Co., Shikoku Power Co., Tohoku Electric Power Co., Tokyo Electric Power Co., Mitsubishi Corp., and Mitsui. The initial US\$150 million cap on the Fund was raised in May 2000, *see* Res. 2000-1, Bank Minutes and International Finance Corporation ("IFC") Minutes, Meeting of the Exec. Dirs. of the Bank and IDA and the Directors of IFC (May 23, 2000). A second closing took place on October 31, 2000, and two additional private sector participants, Fortnum and Rabobank joined at that time. The fund is now closed.

⁶¹ FREESTONE & STRECK, *supra* note 13, at 281.

⁶² Article 1 of the Articles of Agreement of the International Bank for Reconstruction and Development .

⁶³ FREESTONE & STRECK, *supra* note 13, at 17-18.

developing countries and EIT countries.⁶⁴ In return for the payment for the emission reductions, the project entities transfer to the World Bank, acting as trustee of the fund, the emission reductions generated by the project. The World Bank, as trustee, then distributes such emission reductions pro rata to the fund's participants in proportion to the size of their contributions to the fund. Fund participants can then use the emission reductions so obtained towards satisfaction of their own obligations, whether under the Protocol or pursuant to domestic regulations introduced as a result of the Protocol, to reduce their greenhouse gas emissions.⁶⁵

B. The Prototype Carbon Fund as a Precedent for a U.S. Corporate Carbon Fund

The position of U.S. corporations today, facing the probability of the “necessary” and “inevitable” mandatory controls on the emission of greenhouse gases, predicted by Immelt, is reminiscent of the position of the parties who participated in the Prototype Carbon Fund in 1999. Like the participants in the Prototype Carbon Fund, U.S. corporations have been exploring ways to prepare for mandatory greenhouse gas emissions controls.

(i) Current U.S. Corporate Voluntary Measures

⁶⁴ *Id.* The carbon dioxide-equivalent emission reductions so purchased are created in many ways. An example of a project that would generate such emission reductions would be a wind power project that is either more costly than a project that would ordinarily be added into the local energy grid, such as coal or natural gas, or has more barriers than a coal or natural gas project. Over its lifetime, the wind power project will generate the number of tons of carbon-dioxide-equivalent reductions that would have been generated by the coal or gas project.

⁶⁵ See David Freestone, *The World Bank's Prototype Carbon Fund: Mobilizing New Resources for Sustainable Development*, New York: Kluwer Law International 282.

Over the last several years, U.S. corporations have taken several proactive steps to prepare for mandatory controls. Such steps have been primarily directed at building capacity and systems to track their greenhouse gas emissions, initiating efforts to reduce their emissions and experimenting with systems for trading reductions. The most extensive of these efforts include the Chicago Climate Exchange, Climate Leaders, the Business Environmental Leadership Council and the Oregon Climate Trust, and a number of other inter and intra corporate trading programs.⁶⁶

The Chicago Climate Exchange (the “Exchange”) is a pilot greenhouse gas emission reductions and trading program.⁶⁷ Its members include eighty one corporations, municipalities and other entities that emit greenhouse gases from facilities in the United States, Canada or Mexico.⁶⁸ All members have committed to reduce their greenhouse gas emissions by 4% below the average of their 1998-2001 emissions by 2006.⁶⁹ The Exchange issues an emissions allowance to each member in accordance with an emission baseline and emission reduction schedule agreed with each member.⁷⁰ Emission reductions eligible for the program include emission reductions earned through investing in projects undertaken in the United States, Canada and Mexico which offset greenhouse gas emissions, such as, for example, landfill methane or agricultural methane destruction projects and projects to renew forests.⁷¹ The Exchange maintains a registry in which eligible projects are recorded and the Exchange issues emission reductions credits to

⁶⁶ For an exhaustive description of these initiatives, see Bryner, *supra* note 12.

⁶⁷ Chicago Climate Exchange, available at <http://www.chicagoclimatex.com/> (last visited August 4, 2005).

⁶⁸ *Id.* Its members include, for example, Ford Motor Company, Dupont and Amtrak.

⁶⁹ *Id.*

⁷⁰ *Id.*

⁷¹ *Id.*

members on the basis of realized mitigation tonnage.⁷² Members can trade such credits amongst themselves.⁷³

The Business Environmental Leadership Council is a group of thirty nine U.S. corporations who have agreed to work individually to reduce their own greenhouse gas emissions, by investing in new and more efficient products, practices and technologies, and together in support of actions to achieve cost-effective emissions reductions.⁷⁴

Climate Leaders is a program of the U.S. Environmental Protection Agency with some thirty seven “Partners”, who are U.S. corporations who have voluntarily agreed to reduce their greenhouse gas emissions by a certain percentage over an agreed timeframe.⁷⁵

The Oregon Climate Trust is a non-profit organization which receives funding from a variety of U.S. businesses and individuals.⁷⁶ Its purpose is to purchase greenhouse gas emission reductions on behalf of corporations, individuals and other entities (which are to be verified by a disinterested and qualified third party) and to advocate for the adoption of sound climate change policies.⁷⁷ To date, most of the projects it has financed are located in the Northwestern portion of the United States but a small portion of the \$4 million it has provided to finance projects has been used to fund non-U.S. based projects (including, for example, a project in Ecuador for the restoration of a rainforest).⁷⁸

⁷² *Id.*

⁷³ *Id.*

⁷⁴ See US CLIMATE ACTION REPORT, *supra* note 36, at 62. The Council is supported by the Pew Center on Global Climate Change. Its members include Boeing, Dupont, Sunoco and Toyota, among others. *Id.*

⁷⁵ *Id.* The coalition includes General Motors Corporation, Johnson & Johnson and Xerox Corporation. *Id.*

⁷⁶ Chicago Climate Exchange, *supra* note 67.

⁷⁷ *Id.*

⁷⁸ *Id.*

Many corporations have also undertaken voluntary emission trading programs which provide for the trading of emission reductions across divisions of a corporation, and externally, with division managers being given incentives to reduce their respective divisions' emissions.⁷⁹ Emission reductions can be generated by reducing emissions or by investing in projects that sequester carbon dioxide.⁸⁰

(ii) The Role and Purpose of A U.S. Corporate Carbon Fund

The current, ongoing U.S. corporate voluntary initiatives prepare US corporations for mandatory controls by creating the infrastructure necessary for such corporations to measure and record their greenhouse gas emissions. Further, the voluntary trading programs prepare these companies for potential future regulation and for carbon trading on a global level. What is missing from these initiatives, however, is a more active and robust means of preparing US entities to avail themselves of the kind of win/win opportunities presented by project-based mechanisms like the JI and CDM Mechanisms.⁸¹ A U.S. corporate carbon fund modeled along the lines of the Prototype

⁷⁹ See Bryner, *supra* note 12, at 281-286. These measures have resulted in considerable improvements in energy efficiency but, because of the growth in the U.S. economy, total emissions of greenhouse gases from U.S. sources, measured as carbon dioxide equivalent, grew by 10.9% between 1990 and 2002. *Id.* at 273.

For example, in 2000, Shell set a target of reducing its greenhouse gas emissions by twenty five percent by the year 2002. At the beginning of each year, it allocates permits to its business units for each of three years based on 98% of its 1998 emissions. A certain percent of each allocation along with three percent of the allocation from 2001 and one percent of the allocation from 2002 are withheld and then auctioned to help stimulate a market and help managers determine the most cost-effective mechanism for their unit—reducing emissions or purchasing credits. Participation in the program is voluntary and restricted to units in developed countries. Sales take place through a sales manager, who keeps a registry of all transactions and ensures that units have the requisite number of permits to cover their emissions at the end of each year; is not the unit is fined. *Id.* at 282-83.

⁸⁰ Bryner, *supra* note 12, at 282-83.

⁸¹ Though project-based emission reduction credits for projects based in Mexico and Ecuador are a feature of the Chicago Climate Exchange and Oregon Climate Trust, they are a relatively insignificant part of those

Carbon Fund and consisting of a pooled fund to purchase emission reductions from JI and CDM projects, would fill this gap.

Such a fund would enable U.S. corporations to pursue the same kind of “learning by doing” experienced by the participants in the Prototype Carbon Fund and its progeny. U.S. corporations could learn from, and build upon, their foreign counterparts’ experience in setting up such a fund. Such a fund would also give U.S. corporations exposure to the needs and demands of developing countries and EIT countries for modern environmental technology. Moreover, it would provide them with opportunities to make a positive contribution to the developing world and to EIT countries which would enhance their standing as good corporate citizens on the domestic U.S. front.

The investment of funds and time in such a fund would not be risk-free, just as it was not risk free for those who participated in the Prototype Carbon Fund and its progeny. For all of the participants in the Prototype Carbon Fund, for example, there was a speculative aspect to their participation. There was no guarantee that the Kyoto Protocol would go into effect when the fund was created. Moreover, given that the modalities of the JI and CDM Mechanisms were still in the process of being developed when the Fund was established, there was no guarantee that any emission reduction credits purchased by the Fund would be recognized under those modalities. Furthermore, the whole process of verifying and certifying emission reductions was still at a nascent stage.

initiatives’ activities. *See* Chicago Climate Exchange, *supra* note 67; *See also* Oregon Climate Trust, *available at* <http://www.climatetrust.org> (last visited August 3, 2005).

The participants in the Prototype Carbon Fund and its progeny assumed these risks because they knew that the mandatory regulation of emission reductions was a train that had left the station and they did not want to get left behind. From their point of view, the sooner they began building knowledge and experience in this area, the better. Further, creating a Fund and participating in it enabled them, as early pioneers of the project-based mechanisms, to shape the details of how the mechanisms would work in practice. Moreover, the fund approach enabled them to share the risks to which these uncertainties gave rise.

Several other advantages also flow from pursuing a fund approach. Firstly, a portfolio approach spreads the risk of total project failure and allows for economies of scale and replication of basic transactions. Secondly, participating in the governance and decision-making of such a fund allows participants to gain experience in the greenhouse gas emission reductions markets and thereby learn by doing.⁸² Thirdly, the use of an entity

⁸² Over time, the “learning by doing” aspect of the Prototype Carbon Fund has been extremely successful and has led to the fund serving as a precedent for several additional funds. These now include two specialized funds and several country-specific funds. The specialized funds are the Community Development Carbon Fund (which funds the purchase of emission reductions from small scale projects that improve the welfare of local communities in the poorer areas of the developing world)(participants include the governments of Austria, Belgium, Canada, Italy, Luxemburg, the Netherlands, and Spain and private companies from Germany, Japan, Portugal, Spain, Sweden, Finland, Norway, and Switzerland) and the BioCarbon Fund (which finances projects that sequester or conserve greenhouse gases in forests, agro, and other ecosystems (participants include the governments of Canada, Italy, Luxemburg, and Spain, and various French and Japanese private companies). The country-specific funds are funds created by specific governments but open to public and private sector participants from the donor country. They include the Netherlands Clean Development Facility, the Netherlands European Carbon Facility, the Italian Carbon Fund, the Danish Carbon Fund and the Spanish Carbon Fund. These funds are designed to purchase emission reductions generated in accordance with the requirements of the JI and CDM Mechanisms of the Kyoto Protocol. See Carbon Finance at the World Bank, available at <http://carbonfinance.org/> (last viewed August 4, 2005). Together with the Prototype Carbon Fund, these funds account for more than \$850 million in resources managed by the World Bank as trustee. (See May 11, 2005 World Bank Press Release on Carbon Expo, www.carbonfinance.org).

such as the World Bank to serve as trustee of the fund avails of the experience, ties and leverage such an entity has with the countries hosting the projects being funded.

These same considerations would apply for potential participants in a U.S. corporate carbon fund. Mandatory controls are very likely to be introduced in the U.S. but there is a slight chance that they won't be. Moreover, the precise nature of such expected controls is not yet known and there would be no guarantee that the emission reductions earned by a U.S. corporate fund would be recognized under the U.S. domestic scheme that may eventually be established. However, the reasons and considerations that prompted the participants in the Prototype Carbon Fund and its progeny to assume similar risks in participating in those funds, apply with equal force to U.S. corporations as prospective participants in a U.S. corporate carbon fund.

Part III

A U.S. Corporate Carbon Fund as a New Alliance of Legal Principles

A Novel Form of Corporate Governance

Recognizing the reasons why forming a carbon fund would advance the interests of the global environment, U.S. industry and the developing world, is one thing. Constructing a legal modality to achieve the objectives of such a fund is another. Forming a U.S. corporate carbon fund will involve forging an alliance between three very different worlds; the dynamic fast changing world of environmental law; the established, mainstream corporate world of corporate finance, trusts and securities law; and the more

nebulous, less known world of international development aid. Creating such a fund, therefore, will not simply pioneer a U.S. project-based mechanism for achieving greenhouse gas emission reductions, it will involve the challenge of pioneering integration of all three of these worlds.

That challenge involves devising a corporate governance structure for the fund that accomplishes six over-arching objectives. The fund's structure, for example, would need to provide a means for fund participants to undertake an active and ongoing role in the management of such fund. Such a role would be essential to their gaining front line exposure to developing countries' needs for projects that would produce emission reductions and for environmentally friendly technology. The opportunity to obtain such exposure would be a key reason for their participating in such a fund.

Second, and balanced against participants' need for front line involvement, the fund would need a structure that would shield participants from the risk of individual liability for the acts and omissions of the fund. Absent such a shield, one of the key purposes for participating in a fund would be lost. Third, the fund's structure would need to have a procedure for managing the potential conflicts of interest between the participants inter se and between the participants and the fund.

Additionally, the fund would have to clarify the scope of the World Bank's fiduciary duties of such a fund. Such clarification would involve defining the role of the World Bank as an intermediary within the unique requirements of the World Bank, deriving

from its status as an international development institution under the U.S. International Organizations Act.⁸³ As will be shown below, it would be in the interests of both the participants and the World Bank to maintain a clear distinction and disentanglement between the fund's operations and the Bank's lending operations. Moreover, consistent with the growing trend in international development aid to give the recipients of such aid a say in the form such aid should take,⁸⁴ the fund would have to reflect a role for the countries hosting fund-financed projects. Lastly, consistent with its role as a pilot of mechanisms and procedures to be adopted in the future, the fund would have to reflect an agreed methodology for the administration of a portfolio of emission reductions.

Accomplishing these objectives will necessitate a marriage of environmental, corporate and development aid principles. An examination of the key features of the Prototype Carbon Fund shows why this will be so.⁸⁵

(i) Shielding Participants from Personal Liability

The governance structure devised for the Prototype Carbon Fund (the "Fund"), as set out in the Instrument to Establish the Prototype Carbon Fund (the "Instrument"),⁸⁶ creates a framework within which the participants can voice their opinions in the Fund's

⁸³ See *Definition of "International Organization,"* U.S. International Organizations Act. 22 USCS §288 (2005).

⁸⁴ See World Bank Operations Evaluation Department, *Addressing the Challenges of Globalization: An Independent Evaluation of the World Bank's Approach to Global Problems*, The World Bank, 2004, at 84 ("the voices of developing countries...are inadequately represented in the international consensus...[there is a] need to strengthen the role of developing countries...in global programs.")

⁸⁵ The Prototype Carbon Fund is the mother of all eight of the other carbon funds for which the World Bank acts as trustee; the instruments of those other funds are all modeled on the instrument of the Prototype Carbon Fund. For that reason, the provisions of the instrument of the Prototype Carbon Fund will be used as illustrative of the points being made in this article. Any instances in which the instruments of the other funds diverge from those provisions will be cross-referenced where relevant to the point under discussion.

⁸⁶ PCF Instrument, *supra* note 59.

management and operations. The structure has five component parts: a Fund Management Committee, a Fund Management Unit, a Participants' Meeting, a Participants' Committee, and a Host Country Committee.⁸⁷ As trustee, the Bank was charged with forming the Fund Management Committee⁸⁸ (which consists of a Fund Manager and four other members of Bank Management) to exercise general oversight over the Fund.⁸⁹ Day-to-day responsibility for the Fund's operations is vested in the Fund Management Unit, which is headed by the Fund Manager and consists of a staff of technical and operational specialists selected by him.⁹⁰

The participants' active and ongoing involvement is achieved through the Participants' Meeting and the Participants Committee. The Participants' Meeting is an annual meeting of all contributors to the Fund⁹¹ and is the vehicle through which participants exercise an overview role over the Fund's operations. At those meetings, participants review and approve the Fund's annual budget and business plan, provide the Bank with general policy advice and strategic guidance, and approve any suggestions for amendments to the project selection and project portfolio criteria.⁹² The participants also have the power to terminate the Fund by resolution of a two-thirds majority⁹³ and the power to authorize the Bank as trustee to remove a participant in certain circumstances.⁹⁴

⁸⁷ *Id.* at art. VIII, §§ 8.7 and 8.8 & arts. V, VI, and VII. .

⁸⁸ *Id.* at art. VIII, § 8.7.

⁸⁹ *Id.*

⁹⁰ *Id.* at art. VIII, § 8.8.

⁹¹ *Id.* at art. V, § 5.1

⁹² *Id.* at art. V, § 5.1 (a)-(g).

⁹³ *Id.* at art. XV, § 15.2 (a).

⁹⁴ *Id.* at art. IX, § 9.2 (a).

Participants exercise a hands-on role through their involvement in the Participants' Committee. It consists of five participants, two drawn from the private sector and three drawn from the public sector, who are elected at the Participants' Meeting and whose membership rotates annually.⁹⁵ The Participants' Committee does not have to give positive approval to every project funded by the Fund; however, it vets every project proposal to determine whether to object to the inclusion of the project in the Fund's portfolio.⁹⁶ It also provides general advice to the Bank on the Fund's operations.⁹⁷

(a) Partnership, Corporation or Trust?

Forming a U.S. corporate carbon fund which affords the participants the kinds of powers exercised by the participants of the Prototype Carbon Fund, without exposing them to the risk of personal liability pushes the envelope of corporate governance and trust law principles. The objective of creating a jointly managed fund, to be managed by the partners on their own behalf, could readily be achieved by forming a partnership between the participants and contracting with the World Bank to administer the fund as agent for such partnership. An agent undertakes to act on behalf of the principal and subject to the latter's control.⁹⁸ A partnership, however, would not afford the protection of limited liability; the partners to a partnership are jointly and severally liable for the acts or

⁹⁵ *Id.* at art. VI, § 6.1. However, the instrument provided that the first Participants' Committee would consist of seven members, who would serve from the date of their first (organizational) meeting until the second annual Participants' Meeting.

⁹⁶ *Id.* at art. VI, § 6.4(c).

⁹⁷ *Id.* at art. VI, § 6.4(a).

⁹⁸ RESTATEMENT (SECOND) AGENCY, § 1 (1958) ("an agency is the fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act.")

omissions of the partnership or the agent thereof⁹⁹ and cannot limit their liability to the extent of their contributions to the partnership.¹⁰⁰

Forming a new corporation is always an option when limited liability is sought but, for two reasons, the corporate form is not the ideal modality for the kind of idiosyncratic initiative a U.S. corporate carbon fund presents. First, the intensive filing and regulatory requirements of state corporation statutes make the corporate form a somewhat rigid and costly option.¹⁰¹ Second, the corporate form attracts double taxation; the corporate entity is taxed on income earned by it whilst distributions to its shareholders are also taxed as income to them.¹⁰² Instead, two other alternatives, the limited liability company and the business trust (as refined and expanded by statute), pose more attractive solutions.

(b) A Limited Liability Company

The limited liability company (“LLC”) is a creature of statute which first came into existence in 1977 in Wyoming in response to a demand from Hamilton Oil Company for an organizational form that would afford its owners limited liability but which would not be subject to the double-tax regime applicable to corporations.¹⁰³ In the early days of the LLC’s existence, it was unclear whether an LLC would be classified as a corporation or a

⁹⁹ ROBERT HAMILTON & JONATHAN R. MACEY, CASES AND MATERIALS ON CORPORATIONS INCLUDING PARTNERSHIPS AND LIMITED LIABILITY COMPANIES, 33 (8th ed. 2003).

¹⁰⁰ See John H. Langbein, *The Secret Life of The Trust: The Trust as an Instrument of Commerce*, 107 Yale L.J. 165, 184 (1997-98).

¹⁰¹ See R. HAMILTON & J.R. MACEY *supra* note 99.

¹⁰² See L. E. RIBSTEIN & R.R. KEATINGE, LIMITED LIABILITY COMPANIES (2ND ED. 2003) at § 16:2.

¹⁰³ *Id.* at §1:2 (quoting Hamill, *The Origins Behind The Limited Liability Company*, 59 Ohio St. LJ 1459 (1998)). Florida followed Wyoming’s lead in 1982 and passed the Florida Limited Liability Company Act, Fla Stat 608.401-608.471 (supp. 1982), for the purpose, like Wyoming, of luring capital into the state. *Id.* (quoting Comment, *The Florida Limited Liability Company Act*, 11 Fla St UL Rev. 387 (1983)).

partnership for federal tax purposes and so the form was not frequently used.¹⁰⁴ This situation changed in 1988, when the Internal Revenue Service issued a ruling clarifying that properly organized limited liability companies would be treated as partnerships. Following that ruling, all the remaining states that had not already done so adopted limited liability company statutes.¹⁰⁵

An LLC is an unincorporated entity that is formed, or organized, through filing articles, or a certificate, with the state under a state limited liability company statute, the members and management of which do not have vicarious liability for the entity.¹⁰⁶ Arrangements for the governance, management and other business affairs of the LLC, are usually set forth in an operating agreement¹⁰⁷ or, where the parties have not agreed to the contrary, by the default provisions of the state LLC statute.¹⁰⁸

The first LLC statutes contained several restrictions regarding the types of business that could be conducted under an LLC and the types of management and governance structure that could be used.¹⁰⁹ Over time, however, most such restrictions have been eliminated.¹¹⁰ As a result, the LLC has become a very flexible modality under which parties can establish almost any management and economic structure.¹¹¹ Members of the LLC may provide for management directly by the members themselves, or by a selected

¹⁰⁴ See L. E. RIBSTEIN & R.R. KEATINGE at 1:2

¹⁰⁵ *Id.*

¹⁰⁶ See *id.* at 1:3.

¹⁰⁷ See *id.* at 4:16.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.* at 1:4.

group of managers, or by an external third party, engaged to manage the LLC.¹¹² The choice of management and governance structure is largely unfettered; LLC members do not lose their limited liability for participating in the control of the business.¹¹³ The LLC statutes generally protect the creditors of LLCs, however, by imposing non-waivable requirements on the LLC regarding financial disclosures, distributions and dissolution.¹¹⁴

The extraordinary flexibility of the LLC make it, in many ways, an ideal modality for a pioneering fund, such as a U.S. corporate carbon fund, which is piloting a new form of endeavor for U.S. corporations, untested questions about the nature of participants' interests in such a fund and a novel form of property, namely interests in greenhouse gas emission reductions earned from projects in other countries. Such flexibility would allow the participants ample scope to determine how to structure the fund and to establish norms for the generation, ownership, distribution and transfer of emission reductions secured by the fund.

The flexibility of the LLC would also provide enormous latitude to participants to determine the nature and scope of their relationship, and the relationship of the new fund, with the World Bank in setting the parameters by which the Bank would manage the fund. In this respect, however, the flexibility and relative newness of the LLC could prove a mixed blessing. The World Bank, like most large inter-governmental organizations, is a creature of habit. In the Prototype Carbon Fund and its progeny, it

¹¹² *Id.* at 2:3.

¹¹³ *Id.* at 1: 6 (noting that this is the principal distinction between LLCs and limited partnerships on which LLC statutes otherwise are modeled closely in many respects).

¹¹⁴ *Id.* at 1:5

serves as trustee and it has a long tradition of serving as a trustee of a wide range of trust funds.¹¹⁵ In these circumstances, the case for preferring an LLC over a trust fund would seem hard to make if a trust fund were a viable possibility. As discussed below, establishing a trust fund is a viable possibility thanks to the evolution of the business trust form, whose origins long pre-date the LLC and which now exists in a parallel universe with the LLC.¹¹⁶

(c) A Business Trust

In contrast to the LLC, the business trust is the creature of case law. The essence of the traditional trust is the creation of a three-way legal relationship between the creator of the trust (the settlor), the trustee and the beneficiaries of the trust according to which the settlor transfers legal title in the trust property to the trustee for the benefit of the beneficiaries, who thereby acquire equitable title in such property.¹¹⁷ The business trust, however, the dark horse of trust law,¹¹⁸ is a trust form with a difference. In contrast to the traditional, or personal, trust, the business trust was designed from the start to provide a means for parties to establish a fund or other enterprise that would administer funds or carry out activities for the benefit, not of third parties, but of the settlors themselves.¹¹⁹ Its purpose was to provide a medium for the conduct of business and a sharing of gains

¹¹⁵ See IBRAHIM SHIHATA, *THE WORLD BANK IN A CHANGING WORLD: SELECTED ESSAYS* 112-114 (Franziska Tschofen and Antonio R. Parra eds., 1991).

¹¹⁶ See RIBSTEIN & KEATINGE, *supra* note 102, at 1:2 & 2:3.7.

¹¹⁷ RESTATEMENT (SECOND) AGENCY, § 1 (1958) (an agency is the fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act).

¹¹⁸ See generally Langbein, *supra* note 100.

¹¹⁹ Wendell Fenton & Eric A. Mazie, *Delaware Statutory Trusts*, in *THE DELAWARE LAW OF CORPORATIONS AND BUSINESS ORGANIZATIONS* § 19.2 (3rd ed. 2005 Supp.)

by the settlors.¹²⁰ Unlike the personal trust, the business trust is not, and never was, about conserving and managing private property for another generation.¹²¹

The business trust emerged as a legal modality to fill a lacuna in state corporate laws. It was first used in Massachusetts in the nineteenth century to provide corporations, which were not permitted under Massachusetts law to deal in real estate, a means of owning real estate.¹²² Its use quickly spread to other states and during the nineteenth century it became a prominent device for the conduct of enterprise until general corporate statutes made the company form readily available.¹²³ It survived the subsequent expanded availability of the corporate form because of its flexibility as a form and it recent times it has spearheaded a range of commercial activities, ranging from mutual funds to real estate investment trusts, to oil and gas royalty trusts.¹²⁴ There is no set format for the creation of a business trust.¹²⁵ Generally,¹²⁶ the kind of governance structure and beneficial interests that can be established by such a trust are bounded only by the limits of the settlor's imagination.¹²⁷

¹²⁰ *Id.*

¹²¹ *Id.*

¹²² *Id.* Hence, as a modality, it is frequently referred to as a Massachusetts business trust.

¹²³ Langbein, *supra* note 100, at 188-9.

¹²⁴ *Id.*

¹²⁵ See the discussion of the business trust in Nathan Isaacs, *Trusteeship in Modern Business*, 42 Harv. L. Rev. 1048, 1052 (1929) ("Foremost among the advantages of trusteeship over the standardized legal devices is its flexibility. The document creating the trust is the law of the trust. It may determine the types of business, the types of investment, the distinction to be made between corpus and income, and the use of both with the utmost freedom, according to the needs of the case.")

¹²⁶ See generally RESTATEMENT (SECOND) OF TRUSTS § 164(a) (1959) ("As in contract, the autonomy of a party is not wholly unrestrained. For example, there are the obvious public policy prohibitions against trusts for illegal purposes.")

¹²⁷ Langbein, *supra* note 100, at 184-5 (suggesting that the trust's inherent flexibility reflects the origins of the Anglo-American trust as a donative transfer. Starting with the root principle that the owner of property has absolute freedom to give it away as he pleases (subject to perpetuities and dead hand protections), there was no reason to prevent the donor from tailoring whatever organizational regime he wanted to devise to for implementing the gift. In contrast, when the modern business corporation form emerged, it was encumbered with restrictions of a regulatory character, designed to protect creditors and shareholders).

Unlike the LLC, however, the business trust is rooted in a long-established legal tradition because the rules of law that apply to business trusts are the same rules that apply to trusts generally.¹²⁸ Thus, as in the case of all trust law, the creators of the trust exercise considerable autonomy over the terms.¹²⁹ The trust instrument is the supreme authority on what the terms of the trust require;¹³⁰ the rules of trust law apply only when the trust instrument does not contain contrary terms.¹³¹ Thus, on its face, the business trust seems to allow for the flexibility that would allow the participants of a U.S. corporate carbon fund and the World Bank ample scope to determine how to structure the fund and what rights and duties the World Bank as trustee and they themselves, as participants should assume, whilst also establishing norms for generating, owning and transferring emission reductions.

There is, however, one impediment to this largely unfettered flexibility on the design of a business trust which derives from the fact that there is a lingering uncertainty in the law of trusts on the question of whether participants in a business trust are protected from personal liability for the obligations of such a trust.¹³² Ordinarily, a beneficiary of a trust is not personally subject to liabilities to third parties incurred in the administration of a trust.¹³³ Hence, a beneficiary is normally neither personally liable upon contracts made by the trustee in the administration of the trust nor personally liable to third parties for

¹²⁸ See GEORGE G. BOGERT & GEORGE T. BOGERT, *THE LAW OF TRUSTS AND TRUSTEES* §§ 247-251, 255 (rev. 2d ed. 1992).

¹²⁹ See John H. Langbein, *The Contractarian Basis of the Law of Trusts* 105 Yale L.J. 625, 650 (1996) (noting that the trust, like the contract, is a consensual juridical relationship).

¹³⁰ RESTATEMENT (SECOND) OF TRUSTS § 164(a) (1959).

¹³¹ *Id.*

¹³² See Langbein, *supra* note 100, at 183 n.110.

¹³³ RESTATEMENT (THIRD) OF TRUSTS § 5(e) (2003).

torts committed by the trustee.¹³⁴ However, if a trustee acts on behalf of the beneficiary and is subject to its control, the trustee becomes the beneficiary's agent as well as its trustee, and in its capacity as the agent, it can render the beneficiary liable upon a contract made by the trustee and for torts committed by the trustee.¹³⁵

The key factor in determining whether or not a trustee is also an agent of the beneficiaries depends upon the extent of the beneficiaries' right to control the trustee.¹³⁶ If, as a group, the beneficiaries have the power, not merely to elect the trustee, but also to direct the conduct of the business by the trustee, the "trust" will be regarded as a partnership and the person designated as "trustee" will be held to be the agent of the partners.¹³⁷

The control test was first enunciated in the context of the business trust in *Williams v. Inhabitants of Milton*.¹³⁸ In that case, the court held that the beneficiaries of the business trust were liable for the debts of the trust upon a finding that the beneficiaries had the right to manage the trust assets and instruct the trustee as to the management of the trust property.¹³⁹ The court also noted that the beneficiaries had the right to remove the trustee without cause and the subsequent right to fill any vacancies created, to terminate the trust, to transfer the trust to new trustees and to amend the trust instrument.¹⁴⁰

¹³⁴ RESTATEMENT (SECOND) OF TRUSTS §§ 274, 275 & 276 (1959).

¹³⁵ RESTATEMENT (SECOND) OF TRUSTS § 275 (cmt. e), §276 (com. b) (1959).

¹³⁶ RESTATEMENT (SECOND) AGENCY § 14(B) (cmt. d) (1958) (Where a number of persons transfer property to a person, designated as trustee, who is to do business with such property for their benefit, the relation thus created may be a partnership. Whether or not it is a partnership depends upon the amount of control reserved by the contributors).

¹³⁷ RESTATEMENT (SECOND) AGENCY § 14(B) (cmt. j) (1958).

¹³⁸ 102 N.E. 355 (Mass. 1913); *see also* Wendell Fenton & Eric A. Mazie, *Delaware Statutory Trusts*, in THE DELAWARE LAW OF CORPORATIONS AND BUSINESS ORGANIZATIONS § 19.2 (3rd ed. 2005 Supp.)

¹³⁹ *Id.*

¹⁴⁰ *Id.*

Subsequent instances of the courts applying the control test, however, have frequently yielded inconsistent results under seemingly similar circumstances.¹⁴¹ These results are often explicable on the basis of the state's policy of prohibiting the settlor/beneficiaries of a business trust from achieving limited liability without complying with the state's corporate franchise laws.¹⁴² Nonetheless, their inconsistency puts a pall on the flexibility of the business trust. Although no single power retained by the participants over the trustee conclusively establishes personal liability in the participants,¹⁴³ whenever the trust instrument provides for the active, ongoing involvement of the participants, the risk is impossible to dismiss under the case law.¹⁴⁴

Under the case law analyzing the legal status of the business trust, it seems that providing for the participants of a U.S. corporate carbon fund to have the kinds of powers exercised by the participants in the Prototype Carbon Fund and its progeny, in particular, the powers to vet all projects to decide whether to object to their inclusion in the fund's portfolio,¹⁴⁵ to review and approve the annual business plan and budget¹⁴⁶ and to amend the project selection and portfolio criteria,¹⁴⁷ would make such a fund vulnerable to being regarded as a partnership rather than a trust. Absent such powers, the participants would

¹⁴¹ Fenton & Mazie, *supra* note 138, at § 19-7.

¹⁴² *Id.* at § 19-7 and n. 22.

¹⁴³ *See* Crocker v. Malley, 249 U.S. 223 (1919).

¹⁴⁴ *See* BOGERT & BOGERT, *supra* note 128 at § 247(H); *see also* Bank of America National Trust & Savings Ass'n. v. Scully, 92 F.2d. 97 (10th Cir. 1937), Earlsboro Gas Co. v. Vern H. Brown Drilling Co., 52 P. 2d. 730 (1935), and Case v. Kadota Fig Ass'n of Producers, 207 P. 2d. (Cal. App. 1949).

¹⁴⁵ PCF Instrument, *supra* note 59, at art. VI, § 6(4)(c).

¹⁴⁶ *Id.* at § 5.1(a).

¹⁴⁷ *Id.* at § 5.1(b).

not have the kind of hands-on involvement they need to make participating in such a fund worthwhile from a business and learning perspective.

To mitigate the risk that the uncertainty of the law in this area gives rise to, business trusts typically contain language in their constituent documents declaring that the participants shall not be liable for the obligations of the trust and indemnifying participants from the assets of the trust in the event that such declarations are disregarded.¹⁴⁸ Similar migrating measures could be devised to enable the participants of a U.S. corporate fund to achieve their objective of being actively involved in the management of the fund.¹⁴⁹ The law of Delaware, however, in the form of the Delaware Statutory Trust Act,¹⁵⁰ has paved the way for a significant leap forward in the legal status of the business trust which provides much more comfort to the participants in a trust formed under the Act's requirements, than any such mitigating measures can provide.

(d) A Delaware Statutory Trust

¹⁴⁸ Langbein, *supra* note 100, at n.110.

¹⁴⁹ The instrument of the Prototype Carbon Fund, for example, contains similar provisions. It declares that it creates only the relationship of trustee and beneficiary between the trustee and the participants and that it is not the intention of the parties "to create a general partnership, limited partnership, joint stock association, corporation, bailment or any other form of legal relationship other than a trust." *See* PCF Instrument, *supra* note 59, at art. II § 2.2. It also provides that neither the Bank nor the participants will be subject to any personal liability to any third person in connection with the Fund's activities and directs that all contracts entered into by the Bank as trustee of the Fund shall explicitly provide to that effect. *Id.* at art. XII, § 12.4. The instrument also provides for the indemnification of the participants from the Fund's assets for any liability arising out of the activities of the trust, with the exception of liabilities resulting from a participant's gross negligence or willful misconduct. *Id.* at art. XII, § 12.2. As this provision does not fully mitigate against the risk of tort liability, the Instrument also authorizes the Bank, as trustee, to use fund assets to pay for professional liability insurance to cover the participants. *See id.* at art. 8, § 8.1(j). Furthermore, under the agreements entered into between the participants and the Bank as trustee, the Bank agreed to use its best efforts to require the project entities, with which it contracts as trustee of the fund, to purchase emission reduction credits, to maintain appropriate general liability insurance to protect both the Bank and the participants against general liability claims that might arise from fund-sponsored projects. *See* Model Form Prototype Carbon Fund Participation Agreement, attached as Annex 1, at Section 4.1(d).

¹⁵⁰ DEL. CODE ANN. tit 12, §3801 (2005).

The Act, which was passed in 1988 (but has subsequently been amended several times),¹⁵¹ recognizes the statutory trust as an alternative form of business association and provides that all statutory trusts shall be regarded as separate legal entities.¹⁵² It expressly resolves the lingering ambiguity regarding the personal liability of the participants in a business trust overwhelmingly in favor of such participants.¹⁵³ In doing so, it rejects the control test and instead provides certainty by stating that, except to the extent otherwise provided in the governing instrument of the statutory trust, the beneficial owners shall be entitled to the same limitation of personal liability extended to stockholders of Delaware corporations.¹⁵⁴

The Act expressly permits the beneficial owners to participate in the management of the statutory trust without assuming the risk of assuming personal liability for the obligations of the trust.¹⁵⁵ Moreover it provides that, subject to the provisions of the trust's governing instrument, any person (including a beneficial owner) shall be entitled to direct the trustees in the management of the statutory trust.¹⁵⁶ The Act is broad in scope. It employs the widest possible definition of "statutory trust" and provides that the Act shall apply to any business trust, whenever created, that elects to be governed by the provisions thereof by filing a Certificate of Trust with the Delaware Secretary of State.¹⁵⁷

¹⁵¹ The Delaware Business Trust Act was first codified in Chapter 38 of Title 12 of the Delaware Code, 12 Del. Code §3801, which became effective October 1, 1988. It was later amended in 66 Del. Laws, c. 279, 67 Del. Laws, c. 297, 68 Del. Laws, c. 404, 69 Del. Laws, c. 265, 70 Del. Laws, c. 548, 71 Del. Laws, c. 335, 72 Del. Laws, c. 387, 73 Del. Laws, c. 328, and 73 Del. Laws, c. 329.

¹⁵² *Id.*, *supra* n. 50

¹⁵³ DEL. CODE ANN. tit 12, §3803(a) (2005).

¹⁵⁴ *Id.*

¹⁵⁵ DEL. CODE ANN. tit 12, §3806(a) (2005).

¹⁵⁶ *Id.*

¹⁵⁷ 66 Del. Laws c. 279 §2; *See also* Fenton & Mazie, *supra* note 138, at §19.2.

In sum, both the LLC statutes and the Delaware statutory trust afford a mechanism for U.S. corporations to form a U.S. corporate carbon fund in which they can be actively involved without being exposed to liability for the fund's acts or omissions. In doing so, they facilitate charting new territory by providing U.S. corporations with an opportunity to collectively pilot a project-based greenhouse gas emissions reduction mechanism whilst simultaneously gaining knowledge and experience in dealing with the developing world.

(ii) Managing Potential Conflicts of Interest

The specter of corporations, many of whom would ordinarily compete with other, collaborating together as co-participants in a business trust, is not an everyday phenomenon in U.S. corporate activity.¹⁵⁸ Such collaboration raises an immediate need for a mechanism to manage potential conflicting interests. The participants' collective interest in a U.S. corporate carbon fund would have to be balanced against their independent corporate interests as profit-making entities. No participant, for example, would want its participation in such a fund to preclude it or its affiliates, from investing in projects associated with fund-sponsored projects, or in other funds or ventures that might compete with the fund. At the same time, all participants would want the process for approving proposals for fund financing to have integrity.

¹⁵⁸ SEMATECH, a consortium of 14 U.S.-based semiconductor manufacturers formed in 1986 to work with the U.S. government to solve common manufacturing problems by leveraging resources and sharing risks, is a recent example of such an inter-corporation collaborative initiative. SEMATECH raised antitrust concerns because it consisted solely of semiconductor manufacturers. A U.S. corporate carbon fund could avoid raising such concerns by ensuring a diverse group of participants.

The mechanism devised under the Prototype Carbon Fund for managing such potential conflicts of interests involves a two-part process requiring, (a) disclosure by a participant of any competing interest it has with the fund or with any project under consideration for fund approval; and (b) recusal by such a participant from participating in decisions of the Participants' Committee and/or the Participants Meeting when the existence of the competing interest precludes the possibility of the participant's objective participation.¹⁵⁹ Thus, the Instrument requires a participant who has an interest in a project associated with a project being considered for funding by the Prototype Carbon Fund or in a venture that competes with the fund, to disclose that interest to the Bank as trustee, prior to the Participant Committee's review of the pertinent project proposal.¹⁶⁰

The Instrument provides for a self-policing mechanism to police implementation of this provision. It gives the Bank, as trustee, the authority to determine whether the interest that a participant has disclosed is such that it should not take part in the Participant Committee's deliberations on the project.¹⁶¹ If a participant disagrees with the Bank's determination, it can advise the Participants' Committee of the conflict or potential conflict.¹⁶² In such case, the Participants' Committee (with the exception of the participant making the disclosure) has the power to decide whether the participant should be permitted to take part in the Participant's Committee's deliberations on the project.¹⁶³ Further, the Bank as trustee, in consultation with the Participants' Committee, can decide

¹⁵⁹ See PCF Instrument, *supra* note 59, at art. XVII, § 17.2.

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.*

on how to sanction a participant who fails to provide timely disclosure of a competing interest.¹⁶⁴

Similar provisions would be necessary in any instrument establishing a U.S. corporate carbon fund in order to manage the potential conflicts of interests between the participants inter se and the participants and the fund. A collaboration of U.S. corporations under the framework of an instrument containing similar provisions, which delegated a policing role to the trustee and a self-policing role to the corporations if a participant disagreed with the trustee's determination, would be a new way of doing business in the U.S. corporate world.

(iii) Defining the Trustee's Fiduciary Role

The World Bank would have a lot to bring to the role of trustee of the fund, given its experience as trustee of the Prototype Carbon Fund and progeny, and its vast experience as a provider of project-based lending to the developing world. But both the participants and the Bank would have a strong interest in maintaining a clear divide between the activities of the Bank as a lender and its activities as trustee of a U.S. corporate carbon fund. From the perspective of the Bank, the Bank has a long and involved relationship with all of its borrowing countries, each of which must be a member of the Bank in order to borrow from it.¹⁶⁵ It lends directly to such countries and to other entities provided

¹⁶⁴ *Id.*

¹⁶⁵ IBRD Articles of Agreement III §1 (a) (stating the resources and the facilities of the Bank shall be used exclusively for the benefit of members with equitable consideration to projects for development and projects for reconstruction) *available* <http://siteresources.worldbank.org/EXTABOUTUS/Resources/ibrd-articlesofagreement.pdf> (last viewed August 23, 2005).

such loans are backed by a guarantee from a borrowing member country. Thus, the Bank would probably not want to jeopardize these relationships by assuming obligations as trustee of a U.S. corporate carbon fund that might obligate it to pursue a claim against a member country or a project entity on behalf of the fund.

Such reticence to make the needs of the fund a priority would not square readily with the duties of a trustee. Ordinarily, a trustee is under a duty to the trust beneficiaries to administer the trust solely in the beneficiaries' interests and to take reasonable steps to enforce claims held in trust.¹⁶⁶ True to the principle of the supremacy of the trust deal, however, this general principle of trust law does not apply, if the terms of the trust instrument expressly provide otherwise.¹⁶⁷

In the case of the Prototype Carbon Fund, the Bank and the participants addressed this concern by agreeing that the Instrument would absolve the Bank, as trustee, from any obligation to pursue any action or claim on the participants' behalf against any project entity or Host Country that defaulted on its agreements.¹⁶⁸ The Instrument stops short of determining how such actions or claims will be pursued if the Bank as trustee does decide to refrain. It simply provides that the Bank as trustee and the participants will use their best efforts to agree on satisfactory arrangements for dealing with any such dispute, including, if necessary the assignment and transfer of all or part of the trustee's rights and obligations under the agreement in dispute to a third party.¹⁶⁹ To date, the

¹⁶⁶ RESTATEMENT (SECOND) TRUSTS § 177 (1959).

¹⁶⁷ RESTATEMENT (SECOND) TRUSTS § 164 (1959).

¹⁶⁸ See PCF Instrument, *supra* note 59, at art. XVII, § 17.1.

¹⁶⁹ *Id.*

provisions of these clauses have not yet been invoked and so the tough task of deciding what to do in the event of such a claim has been put off until another day.

The instrument of a U.S. corporate carbon fund could contain a similar provision that excuses the World Bank from having to pursue such claims on behalf of the fund as necessary. The Delaware Statutory Trust Act, however, offers a better solution than the vagueness of the Prototype Carbon Fund's provisions. It allows the beneficiaries of a statutory trust to bring a derivative action on behalf of the trust to assert the trust's claims.

From the perspective of the participants in a U.S. corporate carbon fund, ensuring disentanglement between the affairs of the Bank and the affairs of such a fund would protect them from having their interests as fund participants be at the mercy of the vagaries of the Bank's long established and multifaceted relationship with its borrowing member countries. To avoid such entanglement in the case of the Prototype Carbon Fund, the Bank and the participants agreed that there would be no cross-default clause in the Bank's loan agreements that would entitle the Bank to exercise remedies in the event of a default under an agreement between the Bank as trustee of the Prototype Carbon Fund and a host country or project entity.¹⁷⁰ They also agreed that there would not be any cross-default clause in the agreements entered into by the Bank as trustee that would allow the exercise of remedies under those agreements in the event of a default under any Bank loan agreement.¹⁷¹ Including similar undertakings in the arrangements entered into

¹⁷⁰ See Standard Form Prototype Carbon Fund Participation Agreement, attached as Annex 1.

¹⁷¹ *Id.*

between the Bank as trustee of a U.S. corporate carbon fund and the participants in such fund would protect the interests of all parties. Providing for such boundaries would also serve as a precedent for future collaborations between the private sector and the World Bank concerning pooled funds for international development aid.

(iv) Integrating the Host Countries' Perspective

Current thinking on the most effective way to provide international development aid stresses the importance of consulting with the intended recipient of such aid on the recipient's priorities for its economy.¹⁷² Such consultation is regarded as critical regardless of whether the aid is to be provided in the form of foreign direct investment, loans or grants.¹⁷³ It is especially emphasized in the realm of international environmental development where the notion of an equitable sharing of benefits is embedded in the concept of sustainable development.¹⁷⁴ Part of ensuring that developing countries receive an equitable share of the benefits involves allowing them to have input in how such sharing will be achieved.

Given the importance attached to allowing for developing country input (also commonly referred to as "developing country voice"), the willingness of the World Bank to serve as

¹⁷² See James D. Wolfensohn, *The Challenges of Globalization: The Role of the World Bank*. Address to the Bundestag, Berlin, Germany (April 2, 2001) (arguing that people who live in poverty should be treated as a creative asset that will contribute more than anyone else to eradicate poverty. They do not want charity, they want a chance, and community-based development programs provide such an opportunity).

¹⁷³ The Bank uses a Country Assistance Strategy (CAS) to guide all of its activities in client countries. These strategies, based on the countries' own vision of development, arise from consultation with country authorities, development partners, civil society organizations, and other stakeholders. See The World Bank Group Annual Report 2004 available at http://www.worldbank.org/annualreport/2004/country_priorities.html (last viewed August 30, 2005).

¹⁷⁴ See generally, Philippe Sands, *International Law in the Field of Sustainable Development: Emerging Legal Principles* in Winfried Lang, ed., *Sustainable Development and International Law*, Boston: Graham & Trotman/Martinus Nijhoff, pp. 53-66 (1995).

trustee of a U.S. corporate carbon fund would be conditional on such fund having a process which allows for meaningful consultation with the developing and EIT countries who would serve as host countries to the projects from which the fund would purchase emission reductions.

In the Prototype Carbon Fund, the goal of involving the host countries in the fund's work is achieved by a ground-breaking mechanism, the inclusion of a Host Country Committee as a part of the funds' governance structure.¹⁷⁵ The Host Country Committee is composed of representatives of host countries and potential host countries (countries that have given written endorsement of project proposals under consideration by the fund).¹⁷⁶ Its role consists of providing guidance to the Bank and the participants on the funds' development and implementation, which includes giving advice on proposed amendments to the fund's project selection and portfolio criteria and on effecting an equitable sharing between fund participants and the host countries of any greenhouse gas emission reductions arising from fund-sponsored projects.¹⁷⁷ The Host Country Committee meets at least annually at locations designed to allow for interaction with fund participants.¹⁷⁸ Further, representatives of the Host Country Committee attend Participants' Meetings and Participants' Committee Meetings as observers in order to further strengthen the interaction between the fund and the host countries.¹⁷⁹

¹⁷⁵ See PCF Instrument, *supra* note 59, at Art. VII §7.1. Subsequent funds, such as the Community Development Carbon Fund and the BioCarbon Fund also include Host Country Committees as part of the funds' governance structure to involve the host countries in the funds' work. See CDCF Instrument, Art I §1.1 (36); See also BioCarbon Fund Instrument, Art I §1.1 (45).

¹⁷⁶ See Kyoto Protocol, *supra* note 8 (All projects undertaken pursuant to the Kyoto Mechanisms must be endorsed, in advance, by the host country).

¹⁷⁷ See PCF Instrument, *supra* note 59, at Art. VII, § 7.2.

¹⁷⁸ *Id.*, at art. VII, § 7.4.

¹⁷⁹ *Id.* at art. VII, § 7.3.

The inclusion of the Host Country Committee in the structure of the Prototype Carbon Fund and its progeny was highly novel in the extent to which it allowed for meaningful participation by non-contributing developing countries and EIT countries in the work of those funds. Including a similar provision in a U.S. corporate carbon fund would benefit both the participants and the intended recipients of fund financing and pave the way for improved country focus in collaborations between the private sector, the public sector and international organizations for the involvement of the private sector in international development aid.

(v) Administering a Portfolio of Emission Reductions

A U.S. corporate carbon fund would involve pioneering implementation of a U.S. project-based mechanism for achieving greenhouse gas emission reductions that is yet to be developed. Thus, the provisions of the fund detailing the rights and obligations of the participants and the trustee with respect to such emission reductions would have to be framed in flexible terms which takes the evolving nature of the U.S. framework into account and allows the participants' interests in the reductions, and the trustee's responsibilities with respect to them, to evolve too.

A similar state of uncertainty pertained when the Prototype Carbon Fund was established. There was no agreed modality or consensus at that time as to the nature of the instruments that would reflect the participants' interests in their pro rata shares of greenhouse gas emission reductions. The precise nature of the Bank's obligations as

trustee with respect to such instruments was, therefore, unknown, as was the scope of the Bank's responsibilities to administer a portfolio of emission reduction credits.

The instrument for the Prototype Carbon Fund takes account of this uncertainty by framing the Bank's responsibilities in broad, non-specific terms. Thus, it provides that the Bank, as trustee, will facilitate the process of validating, verifying, and certifying emission reductions earned by fund-sponsored projects without giving any indication as to what such facilitation would entail.¹⁸⁰ Similarly, it provides that the Bank as trustee will facilitate the transfer of greenhouse gas emission reductions from the host countries to the participants without specifying what the Bank should do¹⁸¹

Such broadly worded powers strain the flexibility of the trust device to its limits because of the difficulty vague powers pose for a court charged with determining whether they have been properly discharged. Given that the circumstances would preclude being more specific, however, including such powers in the instrument of a U.S. corporate carbon fund would be unlikely to invalidate the trust.

The instrument for the Prototype Carbon Fund explicitly exempts the Bank from any responsibility to ensure that greenhouse gas emission reductions earned by the Fund will

¹⁸⁰ See PCF Instrument, *supra* note 59, at art. III, §3.2. The instruments for the Community Development Carbon Fund, the BioCarbon Fund, the Netherlands Clean Development Facility, the Italian Carbon Fund, the Netherlands European Carbon Facility, the Spanish Carbon Fund, and the Danish Carbon Fund contain similar provisions.

¹⁸¹ See Information Statement for the International Bank for Reconstruction and Development (2004), available at <http://treasury.worldbank.org/Services/Capital+Markets> (last viewed August 15, 2005). See also PCF Instrument, *supra* note 59 at art. III, § 3.2, Art. VIII § 8.4. The instruments for the Community Development Carbon Fund, the BioCarbon Fund, the Netherlands Clean Development Facility, the Italian Carbon Fund, the Netherlands European Carbon Facility, the Spanish Carbon Fund, and the Danish Carbon Fund contain similar provisions.

be credited under the UNFCCC or the Kyoto Protocol.¹⁸² It provides that the Bank will “endeavor to ensure” that the contractual arrangements entered into among it, the participants, and the host countries and project entities will be “structured flexibly so as to enable them to conform with the guidelines, modalities and procedures of the regulatory framework of the UNFCCC/Kyoto Protocol if, when, and as they are developed.”¹⁸³ An equivalent exemption would be appropriate to include in the instrument of a U.S. corporate carbon fund; it is well established under trust principles that a trustee may limit its liability to the beneficiaries of the trust.¹⁸⁴

Lastly, the instrument of the Prototype Carbon Fund explicitly authorizes the Bank as trustee to carry out its duties by engaging qualified third parties to perform those functions in accordance with relevant standards and criteria “to be developed under the regulatory framework of the UNFCCC and/or national laws.”¹⁸⁵ It also authorizes the Bank as trustee to engage third persons to serve as registrar, transfer agent, or custodians in respect of the Fund’s property, including instruments evidencing participants’ entitlement to greenhouse gas emission reductions, as necessary.¹⁸⁶

Trust law principles freely allow a trustee to engage experts to discharge certain functions in this manner.¹⁸⁷ Drawing upon the Prototype Carbon Fund as a precedent, a U.S. corporate carbon fund could and should provide that the Bank as trustee could engage

¹⁸² See PCF Instrument, *supra* note 59, at art. XIII, §13.3.

¹⁸³ *Id.* at art. XIII, §13.1.

¹⁸⁴ See generally, BOGERT & BOGERT, *supra* note 128.

¹⁸⁵ See PCF Instrument, *supra* note 59, at art. III, §3.2 & art. VIII §8.4.

¹⁸⁶ *Id.* at art. VIII, § 8.4.

¹⁸⁷ See generally Langbein, *supra* note 129.

qualified third parties to verify and certify emission reductions purchased by the fund in accordance with standards and criteria to be developed under U.S. environmental regulations. A similar express authority to retain third persons to serve as registrar, transfer agent or custodian, would also facilitate the operation of such a fund.

The need for fund participants to receive reports on the scope of their pro rata shares in emission reductions secured by the fund, can readily be integrated into standard trustee reporting procedures effected to meet a trustee's duty to report to beneficiaries under principles of trust law.¹⁸⁸ In the case of the Prototype Carbon Fund, for example, the Bank as trustee reports bi-annually to fund participants on the operation of the Fund and provides each participant with a statement of account regarding its share of Fund property at that time.¹⁸⁹ The instrument goes further than the standard reporting obligation by providing that the Bank as trustee will produce a statement of account, upon a participant's request, which confirms the participant's pro rata share of greenhouse gas emission reductions held by the fund.¹⁹⁰ Given the novel nature of the property interests involved, a similar provision would be an appropriate addition to the instrument of a U.S. corporate carbon fund to give added comfort to the participants.

B. A Novel Form of Property

The formation of a U.S. corporate carbon fund would also pose some issues of first impression under securities and tax laws, including, for example, the issue of whether

¹⁸⁸ See generally Langbein, *supra* note 129.

¹⁸⁹ See PCF Instrument, *supra* note 59, at art. X, §10.4.

¹⁹⁰ *Id.* at art. XIII, §13.2.

participants' interests in a U.S. corporate carbon fund would constitute securities; and how such interests would be treated for tax purposes.

(1) Interests in a U.S. Corporate Carbon Fund as Securities

Analyzing the securities law regime as it might apply to a U.S. corporate carbon fund illustrates how such laws will have to adapt to accommodate the new forms of rights and interests to which a regime of mandatory emission reductions will give rise. The importance of determining whether interests in a U.S. corporate carbon fund would constitute securities derives from the fact that the offer for sale, sale and transfer of securities is a highly regulated activity at both the state and federal level. Thus, both the World Bank as the creator and trustee of the fund, and fund participants, would need to know whether and how federal securities laws and regulations and state securities laws would apply.¹⁹¹

U.S. law employs a very broad definition for what constitutes a "security." A "security," according to the United States Supreme Court in *SEC v. W.J. Howey Co.*,¹⁹² is something that creates a "financial relationship" between the parties and looks like an "investment contract."¹⁹³ Further, an "investment contract," according to the Supreme Court, has certain key characteristics: it is a contract, transaction, or scheme whereby a person

¹⁹¹ As an international organization, the World Bank is immune from the application of U.S. and state securities laws ("Blue Skies laws") under the International Organizations Immunities Act, 22 USCS §288 (2005). It has always been the Bank's practice, however, to voluntarily comply with the requirements of such laws as a means of preserving investor confidence in securities issued by it, *See* Information Statement for the International Bank for Reconstruction and Development (2004), *available at* <http://treasury.worldbank.org/Services/Capital+Markets> (last viewed August 15, 2005). Consistent with this practice, the Bank would be vigilant in ensuring that any entity for which it were to act as trustee or manager, diligently complied with applicable securities laws requirements.

¹⁹² *See* *SEC v. Howey*, 328 U.S. 293 (1946).

¹⁹³ *Id.* at 298-299.

invests money in a common enterprise and is led to expect profits, derived solely or essentially from the efforts of the promoter of the enterprise or a third party.¹⁹⁴

Examining the prospective interests of participants in a U.S. corporate carbon fund under this definition, a strong case could be made that such interests would be regarded as securities. The fund would give rise to a financial relationship between the participants *inter se* and between the participants and the Bank as trustee. Additionally, it would involve the investment of money in a common enterprise, with the expectation of earning greenhouse gas emission reductions which would be derived from the efforts of parties other than the participants.¹⁹⁵ A key reason for participants' involvement would be to obtain emission reductions which they hope would count against any future domestic or international legal obligations to reduce their emission reductions that might accrue to them in the future, or which they could sell for profit.

On the other hand, an argument could be made that the participants' hopes of achieving profit from their investment in such a fund is too speculative to constitute an actual expectation of profit.¹⁹⁶ The emission reductions that the participants will earn from their investment in the fund are to count against obligations which at this point are merely

¹⁹⁴ *Id.*

¹⁹⁵ See SEC v. Banner Fund International, 211 F.3d 602 (D.C. Cir. 2000) (holding that beneficial interests in a business trust constitute securities under the Howey test).

¹⁹⁶ See United Housing Foundation, Inc. v. Forman, 421 U.S. 837 (1975), for example, where the Supreme Court held that an insignificant profit motive will not satisfy the expectation of profit requirement. This was echoed in the Court's later decision in International Brotherhood of Teamsters v. Daniel, 439 U.S. 551 (1979). There is also some support for the view that the profit motive must be the primary factor in the marketing of the investment, see e.g. Teague v. Bakker, 139 F. 3d. 892, 1998 WL 168876 (4th Cir. 1998) (unpublished) (affirming lower court decision), although this decision has been described as "questionable." See also THOMAS HAZEN, THE LAW OF SECURITIES REGULATION §1.6[2][C] (4th Ed. 2002).

putative, potential future obligations that are still evolving supports this view. Further, the involvement of the World Bank, which is a development institution, not a for profit entity, and the fact that the fund would effect a transfer of technology and funds to the developing world and that participants could see their participation as prompted primarily by corporate social responsibility concerns, would support this view.

The question of whether or not interests in the fund would constitute securities is significant because of the impact it has on the manner in which interests in the fund could be marketed. The thrust of both state and federal securities laws is to require the issuer of securities to make full and complete disclosure to potential investors of financial and other information concerning the issuer which will enable the investor to make an informed decision on whether or not to assume the risk of investing in the issuer's securities.¹⁹⁷ The securities laws achieve this objective, in part, by requiring issuers to (i) file detailed information concerning their finances and operations with the SEC or equivalent state regulatory authority; and (ii) make such information about themselves, and the securities to be issued, available to potential investors.¹⁹⁸ Thus, the World Bank, as trustee of the fund, would either file information on the fund with the SEC and state authorities in accordance with applicable registration requirements or conduct its marketing activities in respect of the fund in accordance with the requirements of the "private placement exemption" to the U.S. Securities Exchange Act of 1933 (the "1933 Act").¹⁹⁹

¹⁹⁷ HAZEN, *supra* note 198, at §4.20[3][B] (describing the type of information an issuer is required to supply to purchasers). See also 17 C.F.R. §230.502(b)(2)(i)(A).

¹⁹⁸ *Id.*

¹⁹⁹ The pertinent provision of the U.S. Securities Exchange Act of 1933 is set out in 15 U.S.C. §77d(2) .

Under the “private placement exemption”, transactions “not involving any public offering” are exempt from the registration requirements of the 1933 Act.²⁰⁰ The exemption is premised on the notion that not all investors are equal and that institutional investors that are sufficiently sophisticated and have sufficiently strong bargaining positions do not need the protections of federal registration.²⁰¹

The parameters of this exemption have evolved through case law. In *SEC v. Ralston Purina Co.*, the Supreme Court established guidelines for the application of the exemption.²⁰² It held that the exemption only applies if: (1) the offering is made to a limited number of offerees, all of whom have access to the type of information that would be contained in a registration statement filed under the 1933 Act; (2) the offerees are sufficiently sophisticated to demand and interpret the information provided to them; and (3) the offering is of a limited size both in terms of the number of securities offered and the aggregate offering price.²⁰³ The Court also indicated that the requirement that the offer be made only to a limited number of offerees is more readily established if it can be shown that the issuer has a pre-existing relationship with the offerees.²⁰⁴

²⁰⁰ *Id.*

²⁰¹ HAZEN, *supra* note 198, at §4.24[1] (“The exemption for non-public offerings applies to offerings to institutional investors that are sufficiently sophisticated and have sufficiently strong bargaining positions”). *See also* 15 U.S.C.A. § 77(d)(6).

²⁰² *SEC v. Ralston Purina Co.*, 346 U.S. 119, 73 S.Ct. 981 (1953).

²⁰³ *Id.*

²⁰⁴ *Id.*

The burden of proof for establishing that the exemption applies lies on the party claiming its protection.²⁰⁵ That party must show that the exemption's requirements are met not only with respect to each purchaser but also with respect to each offeree.²⁰⁶ Indeed, the exemption has been held not to apply where the issuer could adduce no evidence concerning the actual number of offerees, the offerees' particular characteristics or of a relationship between the issuer and numerous offerees.²⁰⁷ Further, any public advertising is regarded as inconsistent with a claim of a private offering.²⁰⁸ And the use of investment seminars and other promotional meetings will lead to the denial of the exemption.²⁰⁹ The SEC adopted the safe harbor rule contained in Rule 506²¹⁰ to provide additional clarity on the application of the private placement exemption. Transactions that qualify for Rule 506's safe harbor are exempt from state law registration requirements.²¹¹

The obligation to market interests in a U.S. corporate carbon fund within the boundaries of this exemption would have wide-sweeping ramifications. The constraint on the nature of potential participants who could be approached and the size of the fund would not be a problem; the fund would be designed for corporate, not retail, participants, and a reasonable maximum size of the fund (consistent with its pilot nature) would be \$150

²⁰⁵ See *Mary S. Krech Trust v. Lakes Apartments*, 642 F.2d 98 (5th Cir. 1989); see also *Kane v. SEC*, 842 F.2d 194 (5th Cir. 1988).

²⁰⁶ See *SEC v. Murphy*, 626 F.2d 633 (9th Cir. 1980).

²⁰⁷ *Kunz v. SEC*, (10th Cir. 2003), 64 Fed. Appx. 659 (2003) WL1605865 (unreported); see also *Mark v. FSC Securities Corp.*, 870 F.2d 331 (6th Cir. 1989) (the absence of evidence as to actual number of offerees precluded reliance on the private placement exemption).

²⁰⁸ Non-Public Offering Exemption, SEC Act Rel. No. 33-4552, 1962 W.L. 3573.

²⁰⁹ See *Koehler v. Pulvers*, 614 F. Supp. 829 (S.D. Cal. 1985).

²¹⁰ 17 C.F.R. Section 230.506

²¹¹ *HAZEN*, *supra* note 198 at §4.25 (noting that in 1996 Congress preempted the states' ability to apply their Blue Sky registration requirements to many transactions).

million, the size of the Prototype Carbon Fund.²¹² But the constraints on the number of offerees could hurt the fund's prospects of success. Such constraints would entail limits on the kinds of meetings that could be held, the number of attendees that could be allowed and the nature of the written and internet communications that could be made; all such communications would have to be devoid of anything that could be construed as an exhortation to participate in the fund.²¹³

A key concern in introducing an innovative fund of this sort would be the need to educate the private sector on how it would work, the opportunities it would provide for piloting a U.S. project-based mechanism, and the implications for industry over the long term. The very newness of these concepts cries out for an extensive and aggressive marketing campaign. Ideally, such a campaign would include holding conferences, meetings with industry and government representatives and a US-wide road show to convey information on the terms and proposed size of the fund and predictions relating to its performance and the value of the greenhouse gas emission reductions that fund-sponsored projects would generate. The rigid requirements of the private placement exemption are directly at odds with these needs.

Such constraints would also be at odds with the United States' and U.S. industry's broader need to highlight voluntary action being taken to reduce global warming in the face of ongoing global criticism of the U.S. for its decision not to ratify the Kyoto

²¹² PCF Instrument, *supra* note 59, at art. II, §2.3. This figure was subsequently raised to US\$180 million by Res. No. 2000-1 of the Exec. Dirs. of the IBRD.

²¹³ 15 U.S.C.A. §77d(2). *See also* HAZEN, *supra* note 198, at §4.24, §4.25 (Under Section 4(2) of the 1933 Act, the number of investors would be limited to 35 plus an unlimited number of accredited investors and general solicitation is not permitted).

Protocol.²¹⁴ Further, they would undermine the World Bank's institutional mandate to be open and transparent.²¹⁵ Such constraints gave rise to many tensions when the Prototype Carbon Fund was established.²¹⁶ Given these special circumstances; the involvement of the World Bank, and the tight fit between the goals of the fund and the exhortation by the Bush Administration to U.S. greenhouse gas emitting industries to pursue voluntary measures, the formation of this fund²¹⁷ forces the issue of how and when the SEC and state securities regulators will integrate this new regime of mandatory controls and the interests that flow from them, within their purview.

(II) Interests in a U.S. Corporate Carbon Fund as Taxable Interests

Full exploration of the tax implication of a U.S. corporate carbon fund is beyond the scope of this article. Whether established as a business trust or an LLC, the fund's tax status would be governed by the all-encompassing "check the box" regulations finalized on December 18, 1997.²¹⁸ Under those regulations, an entity, such as the fund, can elect whether to be treated as a corporation or a partnership.²¹⁹ An organization which elects

²¹⁴ The Bush Administration's environmental record, especially its repudiation of the Kyoto Protocol, received much foreign criticism in 2001. For example, see Suraje Dessai, *The Climate Regime from The Hague to Marrakech: Saving or Sinking the Kyoto Protocol?* Tyndall Centre for Climate Change Research Working Paper 12 (2001).

²¹⁵ See IBRD, World Bank Policy on Disclosure of Information, available at <http://web.worldbank.org/> (last viewed August 15, 2005).

²¹⁶ At the time the Prototype Carbon Fund was established, NGOs claimed that the World Bank, by establishing the fund, was helping the Western World at the expense of developing countries by plucking "the low hanging fruit" that would earn emission reductions for those Western nations. See S. Smyth, *The Prototype Carbon Fund: A New Departure in International Trusts and Securities Law*, Vol. V, Issue 2, Sustainable Development Law & Policy 28 (Spring 2005).

²¹⁸ See Treasury Decision 8697, 61 Fed. Reg. 66584 (1996), finalizing Treas. Reg. §§301.7701-1 through 301.770-4.

²¹⁸ See RIBSTEIN & KEATINGE, *supra* note 102, at 16:1. See also U.S. Treasury Regulations §§ 301. 77.01-1, 2, 3, & 4.

²¹⁹ *Id.*

to be treated as a partnership for federal tax purposes is not subject to taxation.²²⁰ Rather, income, gain, deduction and losses and credits are reported by the owners as partners.²²¹

The fund, however, would be required to file a federal tax return and to compute income and deductions.²²² Further, the participants would be required to appoint one participant as the tax matters partner.²²³ Tax notices and other communications from the Internal Revenue Service would be addressed to such participant. Thus, the World Bank as trustee of the fund, would be responsible for securing from the participants the information necessary to file such return. Whilst liability to pay the tax would fall to the participants, the World Bank, as trustee could be subjected to direct personal liability if it failed to file a return on the trust's behalf.²²⁴

The novel issues of tax law the fund would present both under federal and state tax law arise with respect to the nature of the *res* being taxed, namely, emission reductions. A decision would have to be made, for example, as to when the emission reductions would become taxable to the participants and on what basis, so as to avoid their having a tax liability for property not yet within their possession. Additional questions would arise with respect to such issues as to how participants' profit or loss on the emission reductions would be calculated and as to the extent to which they might amortize their initial investment in the fund. Given that the fund would represent an implementation of the kind of voluntary greenhouse gas reduction measures being urged by the current

²²⁰ IRC §701.

²²¹ *Id.*

²²² U.S. Treasury Regulations §§ 301.77.01- 1, 2, 3, & 4.

²²³ *Id.*

²²⁴ *Id.*

Administration to reduce global warming, and constitute a response to the calls on the U.S. to increase its international development aid, it is possible that fund participants could garner political will in favor of achieving favorable private letter rulings from the Treasury and state tax authorities on these questions.

Conclusion

The formation of a U.S. corporate carbon fund would be a path-breaking integration of environment and business principles, which would also render significant benefits to the developing world. The language of climate change and global warming is fast becoming part of the corporate landscape; a corporate carbon fund is a way to make it a welcome part. Moreover, private sector involvement in international development aid is fast being recognized as a welcome and necessary part of the global international development aid effort²²⁵, whose needs far outstrip the availability of public resources. A U.S. corporate carbon fund would serve as a template for increased private sector involvement in international development aid. Win/win opportunities are a rare phenomenon in every walk of life. U.S. industry should seize upon this one.

²²⁵ See, TONY ADDISON & GEORGE MAVROTAS, FOREIGN DIRECT INVESTMENT, INNOVATIVE SOURCES OF DEVELOPMENT FINANCE AND DOMESTIC RESOURCE MOBILIZATION (WORLD INSTITUTE FOR DEVELOPMENT ECONOMICS RESEARCH) (2004) John Micklewright and Anna Wright, *Private Donations for International Development* (Discussion Paper No. 2003/82) (United Nations University) (December 2003); Lisa Drei, *Business Partnerships for the MDGs* Vol. 10, No. 3 Alliance For Philanthropy & Social Investment (September 2005), Jeffrey Sachs, *A Role For Everyone*, *Id.* at 20.