



November 28, 2008

Via electronic filing: a-and-r-Docket@epa.gov

Air and Radiation Docket and Information Center
Environmental Protection Agency
Mail Code 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

**Re: Verdeo Group, Inc.'s Comments on EPA's Advance Notice of Proposed Rulemaking for
Regulating Greenhouse Gas Emissions Under the Clean Air Act
Docket ID: No. EPA-HQ-OAR-2008-0318**

Dear Sir or Madam:

Verdeo Group, Inc. (Verdeo) respectfully submits the following comments in response to the Environmental Protection Agency's (EPA) Advance Notice of Proposed Rulemaking (ANPR) for Regulating Greenhouse Gas Emissions Under the Clean Air Act, published in the *Federal Register* on July 30, 2008.

We take this opportunity to provide the EPA with Verdeo's perspective on what we believe to be the most efficient and cost-effective approach to reducing greenhouse gas (GHG) emissions through design and administration of a federal climate change program. While the ANPR extensively addresses a range of scientific, legal and economic issues pertinent to climate change regulation, we have limited our comments to those portions of the document that pertain to discussion of market-based GHG regulatory controls. Our purpose in writing is not to express an opinion on such issues as the causes of climate change or what levels of GHG reductions the U.S. should aim to achieve. In particular, we do not take a position on whether the Clean Air Act is the most appropriate legal mechanism under which the EPA should regulate GHG emissions. Instead, we write to the EPA with the objective of sharing our perspective on what we consider to be the most important elements of a market-based approach to reducing GHG emissions. Our suggestions are based on our experience as a growing U.S. business whose sole focus is on helping companies with significant sources of GHG emissions implement innovative, effective, and profitable projects to reduce such emissions - particularly in light of impending state, regional and federal climate change regulation.

Through the current and previous work experience of Verdeo's founders and team members, we have gained significant insight into the workings of the international carbon markets under the Kyoto Protocol's Clean Development Mechanism (CDM), as well as voluntary and emerging compliance carbon

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regimes in the U.S. Based on our global engagement in environmental markets, we believe that the most effective and sustainable approach to reducing GHG emissions is one whereby the EPA fully engages the innovative capacity of U.S. businesses through the use of well-designed, market-based mechanisms that: (1) reduce the economic costs of compliance, (2) promote deployment of existing and new clean technologies, and (3) foster the creation of new jobs through new business opportunities for innovation. In order to achieve the levels of GHG emission reductions required by both the environmental imperative and in various U.S. Congressional legislative proposals, American businesses – those like Verdeo and the clients we work with – should be fully utilized as an active part of the effort to mitigate climate change.

About Verdeo

Verdeo serves as a full-service resource for companies looking to develop and monetize GHG emission reductions in the U.S. We provide comprehensive GHG emission reduction advisory, project development, and finance solutions, and offer a range of proprietary and differentiated technologies to our clients through exclusive partnerships. Verdeo is not a carbon fund or trader of carbon credits. We serve as trusted advisors to our clients to help quantify their GHG emissions, assess their exposure to future state, regional and federal climate change regulation, and design technology-driven solutions that reduce their potential future emissions liability or generate tradable voluntary reductions. We specialize in working primarily with companies that have extensive sources of methane emissions, including those in the mining and oil & gas sectors, as well as the livestock and food processing sectors. Our diverse clients are located across the U.S. with operations in such areas as Texas, Oklahoma, Wyoming, Pennsylvania, Utah, West Virginia and Colorado.

Verdeo was launched in late 2007 by three U.S. citizens who previously served as executives of a leading London-based asset management group. Each of the founders oversaw a geographic region for the firm’s \$1 billion carbon fund, and developed numerous emission reduction projects under the CDM and voluntary carbon regimes. During this time, Verdeo’s founding team originated a pipeline of over 40 million metric tons of tradable emission reduction credits with an approximate market value of U.S. \$800 million in such sectors as coal mining, agri-business, heavy industry, forestry, and renewable energy sectors. In 2007, Verdeo’s founders sought to bring their knowledge and experience back to the U.S. to help companies take advantage of the enormous opportunities presented by the growth of voluntary and emerging compliance carbon markets. Since its founding, Verdeo has grown to a full-time staff of seven with offices in Washington, DC, Texas and Colorado. Our investors include Black River Asset Management, a subsidiary of Cargill, and Wolfensohn & Company, a leading New York investment firm founded by James D. Wolfensohn, the former President of the World Bank.

Overview

To achieve both short- and long-term GHG emission reduction targets currently being proposed in various Congressional legislative proposals and by respected members of the scientific community, the U.S. will need to facilitate a widespread shift in capital investment to mobilize deployment of emission reduction projects and clean energy technologies. The nature of how regulation is designed will have significant impacts on the associated costs and benefits across the U.S. economy.

A fundamental and necessary goal of any good policy should be the ability to achieve desired outcomes at the lowest overall economic cost, while providing the means to maximize potential benefits. As the EPA embarks upon the process of exploring the range of available mechanisms for regulating GHG emissions,

Verdeo encourages the Agency to focus on utilizing flexible, market-based programs and policy tools that achieve these important objectives. Verdeo strongly supports implementing a cap-and-trade program with well-designed cost-containment mechanisms as a cornerstone approach to cost-effectively reducing GHG emissions. While we recognize that the setting of mandatory reduction targets may not alone be sufficient to deliver the kind of large-scale, sustainable shifts in technology and capital investment that will be required across the U.S. economy, we believe a broad, well-designed cap-and-trade program is the best way to drive the reduction of the nation's GHG emissions by providing consistent, long-term price signals which encourage innovation and the deployment of low-carbon technology.

Through our team's deep experience in international and U.S. carbon markets, we have gained valuable insight into some of the key policy design elements that will be necessary for any federal program to succeed in cost-effectively reducing emissions while stimulating private sector capital investments in new technology and infrastructure. As the EPA embarks upon the process of exploring mechanisms and policies for addressing GHG emissions at the federal level, Verdeo encourages the Agency to strongly consider the following principles described below. These principles are described in more detail in the next section, which more fully outlines why we believe they should serve as a foundation for a federal climate change program.

U.S. policy should be consistent and long-term – A U.S. federal approach to reduce GHG emissions must include a long-term commitment, along with clearly defined interim emission reduction targets. These targets will be necessary to successfully engage the private sector and allow companies to develop long-term capital planning and investment strategies that are consistent with GHG emission reduction requirements established by federal climate change regulation.

U.S. policy should enable GHG reductions are achieved at lowest cost – The economic efficiency of any climate change program will be maximized by the extent to which U.S. policy can catalyze activity which produces emission reductions at the lowest cost of abatement. A cap-and-trade program should be the cornerstone of an approach to address climate change, and should include adequate cost-containment mechanisms including a well-designed, robust carbon offset program which will allow covered facilities to more cost-effectively meet reduction obligations while keeping energy costs affordable for consumers and businesses.

U.S. policy should recognize sources of emissions through the most appropriate mechanisms – A U.S. approach to reducing GHG emissions must recognize that not all sources of emissions should be addressed in the same manner. Some emissions are better suited to coverage under an emissions cap, whereas others may be better addressed if recognized as offsets. Alternately, a command-and-control approach may be better suited to help reduce emissions from other sources.

U.S. policy should stimulate capital investment and innovation from the private sector – Innovation is the backbone of the American economy and is fueled when U.S. businesses are provided with the right market investment signals. In addition to providing a consistent regulatory environment, the EPA should consider a range of financial incentives that may be necessary – particularly in the near-term – to immediately stimulate investments in new technologies and clean energy generation. Such incentives may range from investment and production tax credits, to government loan guarantees, to dedicated allowance set-asides or auction revenue set-asides for certain low-carbon or renewable technologies or project types. Such an approach should also be designed to be flexible over time to ensure that financial resources are regularly being directed in the most efficient manner.

U.S. policy should build upon work already being undertaken at the state, regional and international levels – In the process of exploring approaches to regulating GHG emissions, the EPA has the valuable advantage of being able to draw upon many lessons from U.S. states and regions that have taken action, as well as from the CDM and the broader European Union Emissions Trading Scheme (EU-ETS). These existing programs can provide the EPA with insights regarding effective climate change program design and operation, and, in particular, lessons about offset program design and implementation.

Comments

I. ADOPT A MARKET-BASED APPROACH TO ADDRESS GHG EMISSIONS COMPRISED OF A CAP-AND-TRADE PROGRAM THAT INCLUDES A ROBUST OFFSET PROGRAM.

A “carbon offset credit” is an instrument reflecting the value of the reduction, avoidance or sequestration of a unit of CO₂e that is generated from within an uncapped sector or facility. Offsets allow emission reductions generated outside the scope of a regulated or capped system to offset emission reduction requirements within the capped system, and serve as a valuable flexibility mechanism within a market-based program to reduce GHG emissions. By allowing the use of verified credits that have been generated anywhere in the economy at a low cost of abatement, capped entities get an additional option to meet their obligations, taking advantage of offsets when the costs of purchasing allowances or investing in internal emission reduction projects are cost-prohibitive.

Due to the global nature of the effect of GHG emissions, offsets are an attractive policy option to encourage emission reductions as widely as possible throughout the economy while achieving an equally valuable environmental benefit. For this reason, offset programs have been included in numerous existing and proposed climate change programs in the U.S. and around the world, including the EU-ETS, the Regional Greenhouse Gas Initiative (RGGI), the California Proposed Scoping Plan for AB32, and the Western Climate Initiative (WCI). Offset programs are also considered a leading feature of proposed Congressional climate change proposals, including S.2191, the “Lieberman-Warner Climate Security Act of 2008” proposed by Senators Joe Lieberman and John Warner, and the recently introduced climate change legislative discussion draft proposed by Representatives John Dingell and Rick Boucher.

We realize that, despite the many obvious benefits of offsets, there have also been criticisms leveled against them over the years, particularly against the Kyoto Protocol’s CDM. Having worked in the CDM market since its inception, Verdeo’s founders are keenly aware of the nature of such criticisms and agree there is significant room for improvement. However, we also recognize that the CDM remains a relatively new market and believe that program challenges should not overshadow the tangible success that CDM has also produced. As the EPA explores design options for an offset program, we encourage the Agency to build upon the experience of the CDM, as well as new voluntary offset programs and compliance programs emerging in the U.S.

As a supplement to Verdeo’s comments on offsets below, please see Appendix A for a more detailed outline of design elements we believe will be important for maximizing effectiveness of a federal offset program.

A. A robust offset program will encourage innovation and deploy new technologies to achieve GHG emission reductions across a broad scope of the economy – not solely in regulated sectors.

A cap-and-trade program is an effective means of targeting GHG emission reductions from large, easy-to-measure sources, such as the electric power sector, and large and mid-size industrial and manufacturing sources. Yet GHG emissions are generated from a range of sectors and facilities throughout the economy, not all of which easily lend themselves to regulation under an emissions cap. Specifically, the costs to industry and to the Agency of annual monitoring and measurement for small point sources can be prohibitive. Most climate change proposals, including S.2191, are designed to regulate the majority of emissions sources in the U.S., but not all. These remaining emissions, 18% of the U.S.’s total in the case of S.219, still offer significant reduction opportunities and often at lower marginal costs of abatement. For this reason, a well-structured offset program can help to provide valuable incentives for companies in unregulated sectors or with unregulated facilities to reduce emissions.

Offset opportunities tend to be concentrated in sectors where there are challenges associated with regulation; for example, where the aggregate level of emissions may not be high enough to warrant coverage under an emissions cap, where the costs of regulation would be unduly burdensome or expensive for such sources or for the government, or where emissions may not be easily measured. Such sectors may include agriculture, mining, waste, and forestry, and potential offset projects could be those that capture and destroy/utilize methane from farms, mines, or landfills, or where carbon is sequestered through afforestation or reforestation. As an example, there are thousands of livestock farms in the U.S. which account for approximately 8% of anthropogenic methane emissions in the U.S. The annual costs to monitor, measure and reduce emissions from each of these farms under point source regulation would be very high relative to the potential total reductions that would be achieved. However, allowing these farms to generate offset credits for sale into the cap-and-trade system establishes an economic framework which will result in those reductions occurring if they are cost-effective relative to other abatement options in the economy.

In addition, some regulated sectors may have portions of their operations that do not lend themselves easily to direct coverage under an emissions cap. In these instances, the ability to generate offsets can be a useful tool to foster reductions that companies would otherwise have little or no incentive to address. For example, fugitive methane emissions from the production, processing and transportation of natural gas are generally considered to be more usefully addressed when allowed to serve as offsets rather than regulated under a cap. These emission sources, which are relatively small compared to emissions from other sources, can be numerous, disparate and expensive to measure for compliance-based reporting in light of the relative benefits (e.g., scale of emission reductions achieved when compared to costs). If recognized as offsets, companies would have an incentive to invest in the tools required to address these emissions in exchange for the ability to leverage carbon finance for such projects. Interestingly, many of these sources are in some ways regulated today by the EPA for other pollutants and require permitting under the provisions of the CAA. It has been our experience that the enormous number of facilities relative to the small number of regulators available to monitor compliance has created a “cat-and-mouse” game whereby industry has only marginal incentive to achieve full compliance. Under an offset program where industry has an economic interest to proactively demonstrate ongoing compliance, incentives are aligned around the goal of reducing GHG emissions. It is in our view likely that many projects to reduce emissions and monitor their performance would be voluntarily undertaken as a result.

To optimize the market for investment in offset projects and create certainty for project investors and developers, an offset program should be designed to clearly define the sectors that are eligible to generate offset credits, and outline specific project methodologies to determine baseline emissions and quantify emission reductions. In addition to providing the market certainty necessary to foster investment in recognized offset project types, the U.S. must also ensure that an offset program is designed to accept new project types that hold promise for credibly reducing GHG emissions. One benefit of an offset program is the engagement of the private sector to serve as a laboratory of innovation by devising new means of reducing emissions. Companies should maintain the ability to petition to an offset program administrator to have new project types reviewed on a case-by-case basis. This ability is necessary to continue to promote technological innovation, unlocking emission reductions within new project sectors and activities. This flexibility can also play an important role in assisting an offset program administrator with developing new standards for project sectors and activities that may eventually be appropriate to include more formally within an offset program or capped sector.

B. A robust carbon offset program is a proven means to help the U.S. achieve needed emission reductions at a lower overall cost.

Offsets are a proven, effective way to help regulated entities achieve required emission reductions at the lowest possible cost, thereby lowering the overall costs of compliance for the economy. This fact has been demonstrated through numerous economic models designed by a range of entities, including the EPA, which have evaluated the anticipated cost impacts of various offset use provisions for S.2191. Notably, all of the modeling on S.2191 performed to date has shown that one of the most important drivers - if not the most important driver - of allowance prices is the availability of offsets.¹

The original offset provisions of S.2191 would have allowed covered entities to meet up to 15% of their compliance obligation with domestic offsets and up to 15% of their compliance obligation with international credits. In the EPA's modeling of the impacts of the different offset use scenarios, it found that under an extreme scenario where offsets are not allowed and emissions caps must be met solely through reductions in covered sectors, allowance prices increase by 93% compared to the bill as written. Under this scenario, allowance prices range between \$118-\$160 per ton of CO₂e in 2030 and between \$307-\$425 per ton in 2050.² In contrast, when the EPA modeled a scenario under which the use of offsets from domestic and international sources by covered entities is unlimited, allowance prices were found to fall by 71% compared to the bill as written.³

While Verdeo does not advocate for specific proposals with respect to the amount of offsets that should be allowed under a climate change program, we do support a balanced approach that is considerate of the cost impacts of various proposals. Issues relating to the economic implications of climate change regulation are especially pertinent at this time as we face the reality of a serious global financial crisis and recession in the U.S. While we believe the crisis should not ultimately delay or deter enactment of policy to address climate change, we do believe that designing efficient and cost-

¹ "Insights from Modeling Analyses of the Lieberman-Warner Climate Security Act (S.2191)", Innovative Policy Solutions to Global Climate Change, In Brief. Pew Center on Global Climate Change. (May 2008)

² "EPA Analysis of the Lieberman-Warner Climate Security Act of 2008, S.2191 in 110th Congress". US Environmental Protection Agency, Office of Atmospheric Programs. (March 14, 2008)

³ Ibid.

effective market-based mechanisms that are inclusive of the use of offsets should be of highest importance to the EPA and other government agencies.

C. An offset program must be designed to appropriately balance the need for environmental integrity with ease and effectiveness of administration.

Environmental credibility, or the assurance that a reduction of GHG emissions has actually occurred, is the fundamental underpinning of an offset program. Offset credits must be demonstrated to be “additional”, meaning that the GHG emission reductions they represent would not have likely occurred in the absence of a market for GHG emission reductions, or according to a projected “business-as-usual” scenario. There are a variety of tests that are generally used to determine whether an offset is additional. Verdeo believes that a U.S. federal program must strike the right balance between the need to ensure that offset credits represent real, additional and measurable reductions of GHG emissions, and the need to ensure that that an offset program is organized to be administratively efficient and able to attract sufficient capital investment in uncapped sectors and facilities.

Many offset programs, most notably the CDM, have adopted an approach whereby projects are evaluated on an individual basis on a range of commonly accepted additionality tests. Such project-specific tests include those based on current regulations, trends associated with technology deployment, barriers to implementation, and the financial viability of a project or activity in the absence of the ability to sell offset credits.⁴ While we recognize that there are benefits associated with this approach, Verdeo encourages the EPA to explore other means of evaluating projects and determining additionality, as experience with existing programs has suggested that evaluating projects on a case-by-case basis can lead to inefficient use of time and financial resources. This approach also presents offset developers with substantial uncertainty about whether their projects will be recognized, and creates incentives for system gaming, as project-by-project review remains reliant on a high-degree of subjective evaluation by both independent verifiers and offset program administrators.

To improve certainty for offset developers and investors while reducing incentives for gaming, Verdeo encourages the EPA to explore performance-based approaches for determining offset eligibility, and also incorporate the use of pre-approved methodologies for quantifying baseline emissions and emission reductions. This approach is already being used to various degrees by the RGGI, the California Climate Action Registry and the EPA Climate Leaders Program, and is also being considered as a new approach for the next phase of the CDM. Not only does the performance-based approach provide more certainty for offset project investors and developers, therefore providing a better investment climate for projects, performance-based approaches also streamline the process of offset review and administration – leading to improved program efficiency.

⁴ For more information, please see “The GHG Protocol for Project Accounting” published by the World Resources Institute and the World Business Council for Sustainable Development. The Protocol is available at: http://www.ghgprotocol.org/files/ghg_project_protocol.pdf

II. ADOPT A POLICY APPROACH THAT SPURS PRIVATE SECTOR RESEARCH & DEVELOPMENT IN NEW TECHNOLOGIES, AND FACILITATES CAPITAL INVESTMENT IN SCALABLE, PROFITABLE LOW-CARBON PROJECTS.

The need for significant, long-term cuts in GHG emissions will require global shifts in technology adoption and capital investment, most notably from the private sector. Companies across the world are already in the process of responding to the challenge, having been spurred in large part by compliance carbon markets such as the EU-ETS and the RGGI, along with impending U.S. regulation and the rise of the voluntary carbon market. In a relatively short time frame of just a few years, these markets have generated significant levels of private sector investment toward the effort of reducing emissions.

In 2007 alone, the World Bank estimated the global value of the carbon market at US\$64 billion – a two-fold increase in its value from 2006.⁵ The World Bank also estimated that US\$9.5 billion was invested in 2007 in 58 public and private funds that either purchase carbon directly or invest in offset projects and companies that can generate carbon assets, and further believes that the total capitalization of carbon vehicles could reach US\$13.8 billion in 2008.⁶ As the EPA considers approaches to regulating GHG emissions, it should focus on the benefits of establishing market-based mechanisms and policies that have the ability to stimulate significant levels of private capital investment toward the effort of reducing emissions while simultaneously building the infrastructure of a low-carbon economy in the U.S.

A. Encourage new investment in a clean energy infrastructure, thus generating new business opportunities for U.S. companies and creating new jobs for American workers.

The proposed regulation of GHG emissions in the U.S. is nothing less than a proposed re-organization of the U.S. economy, including the way we generate and consume energy, the technologies we manufacture and the jobs Americans hold. While such re-organization could be a threatening prospect for many given the changes it will surely bring to the economy, we at Verdeo believe that this transition serves as a positive opportunity for the U.S. provided that new policies can be designed to maximize benefits for U.S. businesses and the economy.

Early evidence in the U.S. shows that companies are already looking to take advantage of new investment opportunities presented by the growing voluntary carbon market – both in terms of developing emission reduction projects that can generate tradable credits, and in providing new low-carbon technologies or services that are in growing demand. Further, the proposed levels of emission reductions that have been set forth in various Congressional legislative proposals suggest that once the U.S. does regulate GHG emissions, there will be significant demand for emission reduction credits and new low-carbon technologies.

A future U.S. carbon market holds a great deal of potential to leverage new investment in clean tech research & development, manufacturing and deployment. Results achieved in the global carbon market – led by the CDM – serve as an example of what the U.S. could potentially achieve. The World Bank, for example, has estimated that approximately US\$59 billion in investment has been cumulatively committed to CDM projects over 2002-2007.⁷ The World Bank also estimates that in

⁵ Capoor, Karan, and Ambrosi, Philippe. “State and Trends of the Carbon Market 2008”. The World Bank.

⁶ Ibid.

⁷ Capoor, Karan, and Ambrosi, Philippe. “State and Trends of the Carbon Market 2008”. The World Bank.

2007 alone, the CDM leveraged US\$33 billion in new investment in clean energy, an amount that exceeds what has been leveraged cumulatively in the years since 2002.⁸

The CDM market, which relies almost wholly on the initiative and innovation of the private sector to leverage carbon finance to devise and implement new ways of reducing emissions, has led to the approval of approximately 80 methodologies for large-scale and small-scale emission reduction projects. To date, over 1,200 projects have been registered and over 4,000 projects are in the CDM registration pipeline. While there have been legitimate criticisms of the CDM, and in particular, the registration and approval process which can be fraught with delay and uncertainty, we believe that the results nonetheless achieved have been remarkably positive. The experience of the CDM can provide the EPA with valuable lessons as it designs mechanisms to regulate GHG emissions – including that by providing unregulated entities a mechanism through which they can derive economic benefit by reducing emissions, capital, technology, and jobs will follow. By structuring the process so that inappropriate projects are prevented from participating, a high level of program integrity, with credible, affordable emission reductions, can be achieved. We encourage the Agency to explore approaches that, like the CDM, can generate new entrepreneurial opportunities for businesses and create new U.S. jobs in research & development, investment, manufacturing and project development.

- B. Implement policy that directs capital investment toward new technologies and low-carbon projects to enable the U.S. to generate high-tech export opportunities while supporting emission reductions more broadly throughout the world.

Climate change is a global issue that will require the commitment of countries across the world to address. This includes leadership from and the participation of developed countries such as the U.S. and those in Europe, which have historically been responsible for the majority of the world’s GHG emissions, as well as rapidly developing nations such as China and India, which are now responsible for a growing portion. While there are many ways to go about engaging countries in the global fight against climate change, we believe technology development and transfer must be a cornerstone of the U.S.’s approach. Only by fundamentally changing the energy and technology infrastructure of countries to include clean and low-carbon sources, will countries across the world be able to meet their growing energy needs in a sustainable way.

U.S. climate change policy must be designed to help the U.S. lead in technology research, development, and manufacturing, and also facilitate the export of clean technologies to countries around the world. Evidence from the international carbon market suggests that, in addition to having achieved significant levels of emission reductions in developing countries, the CDM has likely contributed to the successful transfer of technology and information to CDM host countries. While the CDM does not have an explicit technology transfer mandate, analyses of CDM project design documents prepared for the UNFCCC suggest that 39% of all CDM projects may involve some form of technology transfer.⁹ In this respect, an offset program that is designed to help facilitate the transfer of U.S. technologies to countries around the world, while also providing regulated U.S. companies with access to a source of cost-effective emission reduction credits, can generate multiple

⁸ Ibid.

⁹ “Analysis of Technology Transfer in CDM Projects” prepared for the UNFCCC Registration & Issuance Unit CDM/SDM, by Stephen Seres, in consultation with Erik Haites and Kevin Murphy. (December 2007)

benefits for the U.S. economy. Using a robust offset program to encourage U.S. firms in sectors like mining, agriculture, and oil and gas to develop technology to reduce emissions will only position those firms and their technology suppliers to achieve a stronger competitive position worldwide as global industry seeks new ways to reduce emissions cost-effectively.

To this end, we at Verdeo believe that a U.S. federal climate change program must be strategically coordinated, if not integrated, with an international approach to addressing GHG emissions. As the U.N. embarks upon the process of negotiating the next phase of the EU-ETS and CDM, we encourage direct U.S. participation. Opportunities for U.S. businesses in a low-carbon economy will be enhanced not just through creation of new U.S.-based opportunities but through new global opportunities through which U.S. companies can engage. Further, achieving emissions abatement at lowest possible cost will only truly be possible if regulated entities have access to procuring offset credits and investing in projects from the broadest geographic scope.

C. Reward companies that invest in activities and projects to reduce emissions in advance of federal regulation.

As the figures above suggest, companies across the world are responding to a growing investment climate facilitated by policy and market mechanisms that place an increasing value on emission reductions. Though the international market for carbon is by far the largest, U.S. companies are catching up, spurred in large part by the rise of voluntary carbon markets and by impending mandatory programs at the state, regional and federal level. While these market developments are forcing companies to pay attention, significant barriers remain in the way of their ability to effectively respond with new short-and long-term investment decisions. The first and foremost barrier is the regulatory uncertainty of whether a company that makes an investment today will be able to benefit from that investment in the future. Uncertainty around this critical question is often enough to delay action that could be taken by many companies today – an outcome that the U.S. cannot afford.

Verdeo’s customers are today facing this very uncertainty, and the corresponding dilemma of how they should act in advance of a federal climate change program. Many of our clients may not be regulated, and face the potential opportunity of realizing value by investing in projects that will generate offset credits. Other clients, more likely to be regulated, instead struggle to determine the best means of preparing for such regulation and reducing future liabilities. Despite the differences that exist between companies’ exposure to the risks and opportunities under future regulation, all companies struggle with the uncertainties posed by impending regulation and questions about how it will impact their business. This uncertainty is delaying many potential investments in technologies and projects that could be made today to begin reducing emissions.

As the EPA evaluates climate change mitigation design mechanisms, Verdeo encourages the Agency to employ policy measures to ensure that companies which take measurable, credible means to reduce their GHG emissions in advance of regulation are recognized for their actions. At the very least, the EPA must ensure that companies are not penalized. Though Verdeo does not advocate the use of specific policy measures to recognize actions taken by companies in advance of regulation, we do believe there are useful tools that the EPA may choose to consider in its range of available options. Among these are the potential to adjust companies’ emission caps to account for early-action reductions, the ability of projects developed to a high-quality voluntary standard to generate compliance-grade offsets until the end of their crediting period, and establishing a set-aside of

allowances that can be distributed to companies to reward early investments in qualified emission reduction activities or projects, such as those recognized by existing high-quality voluntary programs in the U.S.

In all likelihood, federal climate change regulation remains several years away from implementation. However, during this time, companies will continue to make decisions about their day-to-day operations, future capital planning and investment needs, and strategies for maximizing profitability. Many of these decisions will influence companies' operations for years, if not decades, to come, and will have a corresponding impact on growth trajectories of GHG emissions. We encourage the EPA to consider the value of providing companies with near-term market signals and incentives to begin making investments in emission reductions.

Conclusion

As the EPA further explores regulatory mechanisms for addressing climate change, we encourage the Agency to continue to seek input from a diverse range of stakeholders. Climate change is a critical issue of our time, and crafting an effective solution will require the active participation of businesses, government, the environmental community and American citizens. Throughout this process, Verdeo's team will be pleased to serve as a resource for further information and consultation. On behalf of my fellow colleagues at Verdeo, we appreciate having the opportunity to express our perspectives on market-based GHG emission abatement solutions and program design elements in response to the EPA's ANPR.

Sincerely,

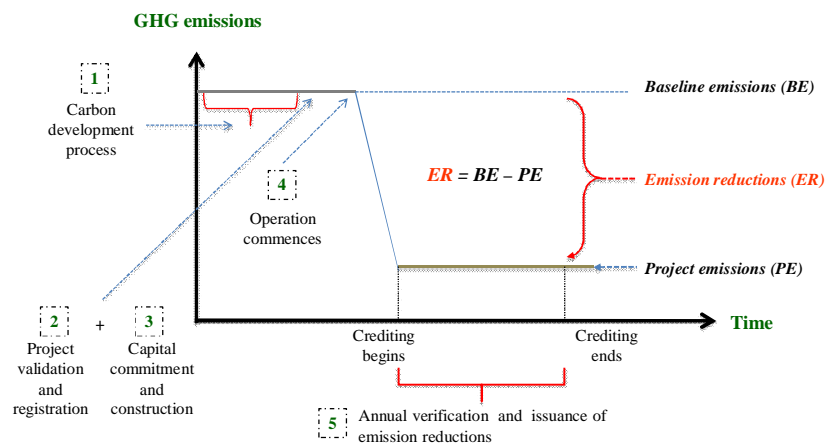


Josh Green
Co-Founder & CEO

APPENDIX A Anatomy of an Offset Project

The process of creating a tradable carbon offset credit requires detailed planning and execution across the lifecycle of a project. In a compliance market, project investors or developers must undertake a multi-step process to determine whether a given offset project is additional and eligible to generate offset credits, establish the value of offset credits by employing an offset project protocol or methodology to measure the underlying emission reductions that will be generated, and develop robust procedures to monitor the project over the life of its established crediting period. As illustrated in the diagram below, it is only through these coordinated steps that an offset project can generate qualified emission reduction credits.

Lifecycle of an Offset Project



Drawing upon our team’s collective experience in existing international and U.S. compliance and voluntary offset markets, Verdeo has outlined what we believe to be the most critical design elements of an offset program that will most effectively facilitate development of projects in a federal compliance market.

Carbon development process - This process is the first and most critical stage in the life of an offset project, as this is the phase in which projects are evaluated for qualification under a given offset program.

A federal carbon offset program should:

- Establish pre-approved project types and project protocols so that investors and developers are equipped with the tools to determine whether a project is eligible to generate offset credits and economically viable. The sooner these project types are established by the Agency, the more likely it is that offset credits from related projects will be available to regulated entities to meet, in part, their compliance obligations.

- Utilize objective performance-based standards, where possible, to define project eligibility and additionality. The offset project approval process should avoid using additionality tests that are highly subjective and prone to gaming, such as strict financial additionality tests.
- Establish a parallel process for investors and developers to petition for recognition of new project types that have not yet been pre-approved by an offset program administrator. Such a process will facilitate innovation to bring as many credible and cost-effective emission reductions into the cap-and-trade system as possible. The process needs to be clearly defined and appropriately resourced to avoid many of the bureaucratic delays which have hindered development in the CDM market.
- Clearly define limited crediting periods for which projects can generate offset credits (generally in the 7-10 year range) to ensure that investors and developers can benefit from a guaranteed multi-year revenue stream. However, the EPA should always select crediting periods that are most appropriate for each specific project type (e.g., forestry projects generally require longer crediting periods).
- Conduct periodic review of pre-approved offset protocols to evaluate whether established project types or practices should be maintained as is, modified or eliminated, or whether new project types and methodologies should be incorporated in the program.

Project validation and registration – In this phase, projects are generally reviewed by an outside party to determine whether or not they should qualify, based on requirements outlined in the carbon development process, as a compliance-based offset project. Under a federal compliance program, validation could be performed primarily by an offset program administrator like the EPA, or could be performed by firms contracted for outside assistance by the Agency. Following successful validation, offset projects would be registered according to the requirements of the offset program.

A federal carbon offset program should:

- Clearly establish requirements for project validation, including, entities certified to perform validation and criteria that must be evaluated for each project.
- Establish a federal offset project registry that effectively records all projects registered and in the pipeline for registration. This registry should be open to the public, and electronically coordinated to the greatest extent possible with any federal system for assigning, trading and tracking allowances to reduce transaction costs and promote transparency.

Annual verification and issuance of offset credits – Offset credits can only be issued after an emission reduction has actually been generated. Under a federal compliance program, offset projects should be reviewed on an annual basis and emission reductions should be verified before being issued as tradable credits in the federal offset registry.

A federal carbon offset program should:

- Clearly establish requirements for project verification, including entities certified to perform verification and criteria that must be evaluated for each project.

- Require periodic, randomized audits of projects, akin to the Internal Revenue Service's auditing of federal tax returns, and levy penalties for non-compliance or other violations of program rules.
- Collect ongoing aggregate data about offset projects developed and registered to help the U.S. evaluate the impacts and outcomes of a federal offset program over time, measure success, and implement modifications to maintain program efficiency and effectiveness.