TerraPass Comments to the Federal Trade Commission
Carbon Offset Workshop – Project No. P074207
January 25, 2008

TerraPass is pleased to submit these comments to the Federal Trade Commission (FTC) to supplement our participation in the workshop on carbon offsets and renewable energy certificates (RECs) held in Washington on January 8, 2008.

INTRODUCTION

As global warming has become a more urgent issue, scientists and policymakers have focused on ways to reduce greenhouse gases (GHGs) that are the dominant cause of the problem. About 70% of GHGs are made up of carbon dioxide (CO_2) released from burning fossil fuels like coal, oil, and natural gas. Landfills and animal farms (e.g., dairies) generate methane – a pollutant more than 20 times more potent than CO_2 – which represents another 7% of GHGs. The remaining gases include nitrous oxide, ozone, and six groups of fluorinated gases.[1]

Most experts agree that GHGs need to be cut by 80% from today's levels by 2050, if we are to avoid catastrophic environmental damage to the planet and humanity. The world's nations negotiated the Kyoto Protocol in 1997 to create a global framework for reducing emissions. To help meet their Kyoto obligations quickly and cost-effectively, countries in the European Union have already instituted GHG reduction programs that permit the trading of emission credits across borders. In the United States, California has passed a law to cut GHGs and several regional alliances of states (e.g., the Regional Greenhouse Gas Initiative representing nine states in the Northeast) are working together on similar efforts. Momentum is building in Congress for federal legislation such as the proposed Lieberman-Warner Climate Security Act that would set a nationwide cap on GHGs and establish target dates for mandatory reductions. Even before legislation requires GHG reductions in the U.S., some companies are making legally binding commitments to cut emissions voluntarily and register their progress on the Chicago Climate Exchange (CCX).

All of these systems rely on market mechanisms to achieve cuts in GHGs in the most cost-effective way, either by allowing companies to trade emission permits with other companies, or by enabling the use of offsets. Market forces help a business find the lowest cost opportunities for reducing emissions, whether that means investing in technologies that cut GHG pollutants at its own facilities, buying reductions from a nearby factory that has already cut emissions beyond

[1] *U.S. Inventory of Greenhouse Gas Emissions and Sinks 1990-2005*, U.S. Environmental Protection Agency, 2007.

its target amounts, or buying offsets that support a local dairy to reduce emissions by improved waste handling. Since economists forecast a wide range of carbon mitigation project costs,[2] market mechanisms will help match the demand for emission reductions with the lowest cost supplies.

Offsets can also solve emission problems in sectors of the economy or in countries not yet subject to an emission cap. Through the Clean Development Mechanism (CDM), an element of the Kyoto Protocol, companies and countries have purchased carbon credits from over 1,000 offset projects to help meet their emission goals, thus providing money for expanded use of low carbon technologies. The United States. does not have an emission cap yet, but many U.S. companies (in efforts separate from CDM) are voluntarily buying CCX-approved offsets as part of their carbon reduction programs.

In recent years, the offset frameworks created for these regulatory and market systems have been translated into voluntary programs for individual consumers who want to participate in solutions to global warming. Consumers are first encouraged to conserve energy and adopt new, energy-efficient technologies where possible. But most people recognize that, even if they focus on conserving energy, they can't entirely eliminate GHG-producing activities like driving, flying, and home energy use (heating, cooling, and lighting). What they can do is compute the environmental effect of these activities as measured in CO_2 equivalents and then purchase offsets to balance out the impact. When people buy offsets from reputable providers that adhere to rigorous standards, they can be confident that the carbon emitted by their daily activities – combined with their offset purchases – results in no net addition to the GHG burden on the planet.

Consumer demand for carbon offsets has increased as the public has gained a deeper understanding of what activities contribute to global warming and the short time frame we have to reverse the global trends in GHG emissions. In response, dozens of offset providers have emerged to create a vibrant, although still nascent, offset industry. As many as 50 companies or nonprofit organizations now offer offsets for sale to consumers on the web, with several providers having sold over 100,000 units since the market started. Some of the larger companies and non-profits include TerraPass, Carbonfund, and NativeEnergy (all U.S.-based); and Climate Care and The Carbon Neutral Company in the United Kingdom.

TERRAPASS

TerraPass was founded in 2004. Formed as a mission-driven business with a goal to deliver substantial environmental and social benefits, TerraPass provides an easy and trustworthy way for consumers to offset their carbon emissions. The business gives citizens a way to participate in carbon markets previously open only to companies. Our online calculators draw upon widely-

[2] *Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost?*, McKinsey & Co. and The Conference Board, December 2007.

supported international protocols and U.S. government data that enable individuals to determine the "carbon footprint" of driving a car, flying in an airplane, or living in a home. Then, consumers balance out the carbon impact by purchasing offsets that support methane digesters at dairies, landfill gas flaring projects, and wind farms. Nearly 100,000 customers nationwide now own some type of TerraPass (Road, Flight, or Home). Collectively, these individuals have offset more than 700 million pounds of carbon.

TerraPass sells offsets through the company web site at www.terrapass.com. To help introduce carbon offsets to the general public, TerraPass has also established corporate partnerships with Ford Motor Co., Expedia, Enterprise Rent-A-Car, Sam's Club, HSBC, Yahoo!, and Flexcar, among others.

From its inception, TerraPass has been committed to the highest levels of scientific and business integrity. Our technical advisory board includes:

- William Moomaw, Ph.D., Professor, International Environmental Policy, Tufts University, Medford, MA, and lead author of the Intergovernmental Panel on Climate Change (IPCC) third annual report, 2002.
- William Schlesinger, Ph.D., President, Cary Institute of Ecosystem Studies, Millbrook, NY, and former Dean of the Nicholas School of the Environment and Earth Sciences, Duke University, Durham, NC.
- Michael Northrup, Sustainable Development Program Director, Rockefeller Brothers Fund, New York, NY.

TerraPass' Founder and Chief Environmental Officer is Tom Arnold, a pioneer in the voluntary carbon market. Tom conceived and executed some of the first carbon offset transactions for consumers in the United States in 2005. He has become a leading expert in carbon offset standards and project analysis. Tom is a frequent speaker at industry conferences and has been quoted regularly in the national media about carbon offsets. Adam Stern, Vice President for Policy and Strategy, previously served as deputy director for the Environmental Defense Fund in New York and special assistant for international affairs at the U.S. Environmental Protection Agency in Washington, DC. Our CEO is Erik Blachford, previously CEO and President of Expedia, Inc., one of the world's leading travel companies. Last July, Erik testified about the carbon offset industry before the House Select Committee on Energy Independence and Global Warming. We have five full-time staff members on the TerraPass carbon team, including Erin Craig, former senior environmental manager at Sun Microsystems and Apple Computer.

The TerraPass web site explains to customers and to the public at large how carbon offsets work, describes the projects and standards we support, details our annual verification and audit process, lists every project we have bought by vintage year and amount of carbon credits purchased, and provides detailed responses to questions frequently asked by consumers (FAQs). In addition to selling carbon offsets, TerraPass also sells a selection of popular energy-saving devices. We manage an influential blog that delivers energy conservation tips as well as the latest news and

debate on climate change science, policy, and politics. Every week we send an electronic newsletter to more than 35,000 subscribers. TerraPass staffs a toll-free telephone line for customer service during business hours and responds daily to customer email inquiries. We also offer a money-back guarantee.

RESPONSES TO FTC QUESTIONS

The FTC has solicited comments on a variety of carbon offset issues affecting consumers:

OFFSET CLAIMS (Q'S 1 AND 2)

TerraPass products contain high quality, independently-verified emission reductions that balance out the impact of carbon emissions from driving, flying, and home energy use by supporting projects in the areas of wind energy, farm power, and landfill gas capture. We back up our claims with full disclosure of our projects and portfolio make-up on our web site and the inclusion of a Product Content Label with every TerraPass.

All of our carbon offset projects are currently located in the U.S. Each project must meet a broadly accepted standard (validation) as determined by an independent third-party not connected with TerraPass or the project developer. Then, an independent third-party must assess how much carbon measured in metric tons the project reduced in a given year (verification).

Each year, TerraPass publishes a list of supported projects with key data: location, project type and details, offset standard used, names of validator and/or verifier, and verified emission reductions in tons. These figures are included in our annual verification report. We also engage an independent audit firm to confirm that consumer purchases are matched by an equivalent amount of carbon reductions.

CONSUMER EXPECTATIONS AND PROPERTY RIGHTS (Q'S 3, 4, AND 5)

TerraPass believes that consumers want to support projects that reduce carbon emissions in amounts equivalent to the impact of their driving, flying, or home energy use. We devote considerable space on our web site – almost every page – to explaining how offsets work, and we make clear to customers that third-party verification confirms that their money is purchasing verified, measurable, permanent carbon reductions – not mere claims. For each TerraPass sold, we mail the buyer a physical sticker or badge with the precise amount of carbon reductions in pounds and if appropriate the expiration date. A product content label is also part of the package. Our TerraPass blog regularly covers the nuances of climate policy and how carbon offsets fit into the big picture.

In addition to explaining the connection between the carbon emissions that result from a consumer's use of fossil fuels and the offsets that balance out the impact, TerraPass conveys the benefits that offset purchases can bring to new technologies. Offsets are a new source of revenue for projects like wind farms or methane digesters at dairies. For example, the additional cash flow from carbon credits can make it affordable for a family farm to install equipment that

converts methane from manure into clean electricity. These broader shifts toward a green economy are part of long-term strategies that will reduce greenhouse gases in the future.

Consumers do not acquire any property rights when they buy carbon offsets through TerraPass. They are paying for a service, not taking custody of project-based emission reductions. When TerraPass purchases carbon reductions from a project developer, we temporarily own rights to the financial instruments that represent the carbon reductions (e.g., carbon credits). But before our annual company audit, we retire the credits from the market and record the retirement transaction in an independent carbon registry.

TIMING OF EMISSION REDUCTIONS (Q 6)

TerraPass follows a vintage-matching policy, i.e., carbon reductions are sourced from projects operating in the same vintage year as the year in which customers buy their offsets. This is an important principle for two reasons. First, consumers expect a temporal connection between the activities (driving, flying, or living in a home) that create carbon emissions and the operation of projects that offset the emissions. Secondly, global warming is an urgent problem that needs attention now. Scientists report that unless we start reducing emissions right away, some of the early effects of climate change will become irreversible.

An offset practice that we consciously avoid is forward-selling contracts such as those common in tree-planting programs. Trees offer many environmental benefits, but newly planted saplings may take 40 years to reach maturity and 70-100 years before their carbon-absorbing potential is realized. Meanwhile, the consumer is sold the entire lifecycle reductions in the first year of the contract. Growing new trees takes too long to contribute meaningfully to a carbon reduction program. In addition, the risks to permanence from fire or lost forest protection make new trees an unreliable type of offset project. Offset providers should not sell carbon savings today that may never occur in the future. Similarly, the practice of selling an annuity of carbon reductions that will result from operating a wind turbine for the next 20 years violates the vintage-matching policy described above.

ADDITIONALITY (Q 7)

TerraPass believes that additionality is critical to the integrity of carbon markets. Offsets aren't simply a tool for rewarding good projects such as methane digesters on small dairy farms. Rather, offsets are financial instruments that link these projects into a regional or global marketplace for emission reductions.

If such markets are to mean something, offsets must be additional. If the offsetting reductions would have happened without a carbon market, the market as a whole will fail to achieve its environmental objective. Further, one of the main purposes of a carbon market is to set a clear price for carbon emissions that industry can use for planning and investment purposes. If offsets are non-additional, that price becomes distorted and the market ceases to function properly. Experts have estimated that the potential global supply of offsets is roughly in the billions of tons of CO_2. Keeping in mind the main goal of reducing CO_2 emissions as quickly and cost-

effectively as possible, we should integrate those billions of tons of potential savings into the global carbon market. And additionality is the key to doing so.

TerraPass makes sure that the offsets we sell to consumers are additional by running each and every project through internal due diligence, followed by third-party validation and verification against broadly accepted third-party standards. We disclose a complete list of our projects on our web site, the standards and protocols we use, and the independent verification procedures employed. TerraPass' consistent emphasis on public disclosure and transparency is the centerpiece of our commitment to protecting consumers.

INDEPENDENT STANDARDS AND SELF-REGULATORY PROGRAMS (Q 9)

TerraPass is encouraged by the recent emergence of two independent carbon offset standards that can help protect consumers. In June 2007, the nonprofit Center for Resource Solutions (CRS) of San Francisco released its Green-e Climate program. Offset products approved under Green-e Climate must be:

- From "additional" projects – initiatives that reduce greenhouse gases in ways that go beyond business-as-usual practices and are not mandated by government regulations;

- Independently certified – originate from projects that meet the standards of qualified offset certification programs;

- Not double-counted – emission reductions are tracked through independent registries to ensure that the credits are only counted once; i.e., a single entity gains custody of the offsets, sells them to customers, and then retires them so that the offsets can no longer circulate in the market;

- As advertised – when offsets are verified, the associated marketing claims are reviewed for accuracy.

The Climate Group (London) and the International Emissions Trading Association (Geneva) have developed a separate program called the Voluntary Carbon Standard (VCS). Released in November 2007, VCS is a global standard that requires offsets to be real, additional, measurable, permanent, independently verified, and unique. A rigorous set of procedures, particularly in terms of meeting additionality tests, must be followed for an offset to qualify under VCS.

Both Green-e Climate and VCS were reviewed by hundreds of stakeholders (e.g., carbon experts, industry participants, and environmental and consumer groups) and went through several versions before final release. It's too early to assess the impact of these standards, but TerraPass and other offset providers are moving towards adopting them in 2008. We believe that the voluntary market will coalesce around Green-e Climate and VCS – an outcome that will strengthen consumer confidence in carbon offsets.

CONCLUSION

We appreciated the opportunity to speak at the FTC workshop on carbon offsets earlier this month. The workshop raised many interesting issues, which the FTC may want to explore further. The voluntary offset market is still at an early stage of development. TerraPass is proud of our efforts to provide an industry-leading level of disclosure about our carbon offset projects, verification procedures, and annual audit process. These practices – along with the emerging Green-e Climate and VCS standards – represent major steps towards protecting consumers. We are ready to assist the FTC as the agency continues its research on the carbon offset market.