

ENVIRONMENTAL GROWTH STRATEGIES

Alternative Energy Market Opportunity

Executive Summary

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Introduction

Thousands of web sites reflecting entrepreneurs, energy experts, sellers, buyers, brokers, sustainability gurus, products, services, consultants, auditors, certifiers, planners, issuers, producers, analysts registries, agencies and providers of ratings have proliferated the “green-environmental movement” in recent years.

Much of this new-wave expertise represents legitimate intellectual property that will indeed increase the nation’s energy efficiency, leading to reduced dependence of foreign fossil fuel supplies; while at the same time reducing well documented pollution and green house gas emissions, claimed by many to be contributing to global warming.

Largely absent from the nation’s business efforts to capitalize in a tremendously robust emerging industry are lenders and secondary market investors. The environmental markets are driven to a degree by un-insured certifications, un-insured energy credits and non-marketable government rebates as incentives.

The issuers of these certifications and credits do not provide standardization, sufficient data elements for underwriting or which lenders or investors generally require in the capital markets. They are being issued from hundreds of non-standardized sources providing extremely limited indemnity.

Background

Although Federal agencies have crafted targets for reduction in pollution and increases in energy efficiency, to a large degree the increased efficiencies are incentives for energy producers and distributors to achieve certain percentages of their production and distribution to take the form of energy from sources other than fossil fuels.

The Federal government has struggled politically both domestically and internationally with broad legislation (for example, Cap and Trade legislation), given the backdrop of the recession and increasing foreign rates of energy consumption and pollution. The result is the bifurcation of environmental markets involving energy use and credits (to mitigate pollution) into voluntary markets and pending-legislative mandates.

Generally speaking, the Federal government programs are being shifted to individual state programs (that are essentially Cap and Trade types of initiatives). In California CA Assembly Bill 32 is pending, and it requires both reductions in GHG emissions to 1990 levels by 2020 while also mandating increases in the percent of energy production being derived from renewable, non-fossil fuel sources.

Political recognition of the existence or potential of global warming, caused to a large degree to be caused by fossil fuel green house gas emission has slowed the process of established mandating mitigation of global warming. This has served to slow the adoption of many “renewable” (solar, wind and bio-fuel) energy products, services and technology.

Insurance of crucial elements in the “supply chain” of environmental related businesses, key to lending and secondary market investment, is generally limited to Errors & Omission, Directors & Officers coverage and Business Interruption coverage related oftentimes to natural disasters such as flood, fire, infestation and the like adversely affecting production and/or delivery of products and services related to energy.

Absent for thousands of businesses, particularly for “registries” and “certifiers” of data on which inventory auditing and tracking of ubiquitous energy related credits, offsets and permits”, is insurance that tracks the ownership life cycle, contract rights and validity of said credits.

Program Overview

The credits or certifications fall in to three broad, underserved categories:

- 1) USGBC LEED Certifications*
- 2) Renewable energy Credits*
- 3) Carbon Offset Credits.*

The opportunity exists today to develop two products for each of the three market segments to standardize the process of buying, selling, trading and financing.

Each segment represents an opportunity to create a new standard of

- 1) A “Certified Report”, aggregating data from multiple sources and reflecting a rating of limited liability “accuracy of available sources.*
- 2) An insurance policy underwritten and produced to provide coverage related to ownership, contract rights, lien rights, accuracy and assignability for the benefit of lenders and investors.*

This new standard of environmental certification and insurance, is similar to lender and owner insurance products in the real estate industry and commercial finance markets

Each of these three market segments is separate, currently lacking standardization and data on which lenders and investors can rely. In the real estate markets buyers, sellers, brokers, lenders and investors have come to rely

upon title insurance to insure ownership, chain of title, priority, lien rights and to protect against fraud, forgery and documentation defects.

In the commercial finance markets insurance for the ownership and lien priority of personal property defined by Article 9 of the Uniform Commercial Code has enjoyed significant success in certain narrow markets by providing protections to stakeholders in non-real estate finance transactions.

Such insurance has been standardized and positioned as a credit enhancement in recognition of financing and secondary market considerations.

Credits are currently "registered" by over 125 disparate databases but the registry process lacks standardization and indemnity, and is subject to errors, inaccuracies, omissions and double reporting etc. As of this date, the registration process of the nation's leading registries neglects a standard for verifying ownership, life cycle, contract rights and/or the existence of liens, crucial to lenders and investors as a component of financing.

Market Opportunity

The opportunities in aggregating and merging data related to the registry of credits and certifications is crucial in establishing standardization of protocols for underwriting and insuring ownership, tracking, inventory control and lien detection.

There are data elements such as prior liens (as a contractual obligation) that may not yet specified or included in the registry process. Tying registration and certification of credits to a lien recording facility and to verified ownership of real property have not yet been fully developed.

Acquisition or partnering with a registry, and developing a more robust registry data base that can provide for the underwriting of the credits for insurance purposes will almost certainly create a new standard for the carbon and REC market segment, with buyers, sellers, traders, lenders and investors requiring an enhanced registry and insurance program.

A new standard for the three market segments are:

A) LEED (Leadership in Energy and Environmental Design)

There are two approaches. First, an aggregated/merge "Report" of the USGBC's LEED rating in order to provide a greater level of indemnity from certain damages arising from an incorrect or invalid USGBC rating.

Secondly, the use of a LEED Environmental Policy to insure the validity of U.S. Green Building Council (USGBC) rated “Green Building Certification” for commercial buildings. There are four levels of certification that are obtained by building owners in the buy, sell, renovate context that provide opportunities for tax credits, rebates and loan incentives of up to 30% of capital invested to reduce GHG Emissions and/or increase energy efficiency.

According to public records there are currently 40,000 LEED commercial and government class A and B buildings in major metropolitan markets, with 22,000 pending certification. LEED “providers” issue certificates based on plans, retrofits and audits. Targeted potential customers are owners, builders, brokers, lenders, investors, sellers, tenants, appraisers, architects and engineers. LEED registries, agents, auditors, analysts and provides are likely customers and sales channels.

The insuring of the Green Building Certification can serve to enhance the value of buildings for the benefit of commercial customers, and will serve as a valuable cross-marketing tool for commercial real estate title insurance products.

The USGBC estimates that private sector investment in new construction and renovations relative to the reduction of GHG Emissions and increasing energy efficiency in 2010 was \$300 Billion.

B) Carbon Offset Credits & Permits

There are two approaches. First, an aggregated/merge “Report” derived from multiple data sources in order to provide a greater level of indemnity from certain damages arising from incorrect or invalid carbon registry information.

Secondly, a Carbon Environmental Lender’s Policy while at the same time developing the appropriate Carbon Environmental Owners Policy and underwriting guidelines; and acquire or partner with the appropriate leading Registries and Exchanges.

Carbon emission credits (permits) are purchased or traded to “offset” excessive emissions by one firm, and can be sold or pledged by another operating below State and Federal mandated emission limits. The credits represent an economic incentive to “create” credits to reduce global GHG Emissions.

A voluntary or legislated market will require financing and tracking of credits. The financing and tracking of credits will lead to the establishment of an investor secondary market. The financing, tracking and investor

secondary markets will create the need for active Exchanges. The financing, tracking, investor, secondary market and exchange will drive the need for insurance.

International conventions such as Kyoto and Copenhagen and Federal "Cap & Trade" guidelines are establishing the requirement for reduction in GHG from 17% to 40% over time, with specific time-based benchmarks. Carbon trading Registries and Exchanges are currently being established internationally at this time, in preparation for this substantial emerging market

Industry, Environmental and Governmental experts are anticipating the value of the emerging (voluntary and legislated) carbon emission offset market to be as much as \$1 trillion per year for the buy, sell and trade of carbon credits, in the near future. The Obama Administration Cap & Trade Legislation reflects an estimated value of the "permits" for carbon offsets to be \$645 Billion during the next four years. The U.S. Commodities Futures Trading Commission projects that the carbon offset trading market could reach \$1-2 Trillion by 2020.

A market of this size and scope will require financing and tracking of said credits. The financing and tracking of credits will lead to the establishment of an investor secondary market. The financing, tracking and investor secondary markets will create the need for an Exchange. The financing, tracking, investor, secondary market and exchange will drive the need for insurance.

Voluntary Carbon Trading Registries and Exchanges have been established internationally, in anticipation of this substantial emerging market. Bloomberg New Energy Finance reported recently that the European Union traded \$128 billion in carbon credits in 2010. A stalemate involving the United States and certain international participants related to Kyoto, Copenhagen and U.S. Cap & Trade have stalled the Federal legislated domestic market. Many states are examining individual implementation of Cap and Trade types of programs

A Carbon Environmental Lenders Policy could insure the lender's security interest for the financing of offsets for validity, enforceability, attachment, perfection and priority; and insure the ownership and life cycle of the carbon credits for cash purchases and trades. Capturing a modest fraction of the Carbon offset market at .50 cents per thousand reflects millions of dollars in premium.

It is generally believed that issues regarding ownership rights and priority of liens may arise in which a combination of commercial real estate and

UCC title insurance products may be seen by the market as an essential component of shifting risk.

A Carbon Program could insure the lender's security interest for the financing of offsets for validity, enforceability, attachment, perfection and priority; and insure the ownership and life cycle of the carbon credits for cash purchases and trades. Capturing a modest fraction of the Carbon offset market at .50 cents per thousand reflects \$50 million in premium.

C. Renewable Energy Credits

There are two approaches. First, an aggregated/merge "Report" derived from multiple data sources in order to provide a greater level of indemnity from certain damages arising from incorrect or invalid REC registry information.

Secondly, an REC Environmental Lender's Policy while at the same time developing the appropriate REC Environmental Owners Policy and underwriting guidelines; and acquire or partner with the appropriate leading Registries and Exchanges.

Renewable Energy Credits (RECs) are tradeable, non-tangible energy commodities in the United States that represent "proof" that 1 megawatt-hour of electricity was generated from an eligible renewable source.

These certificates can be sold and traded, and the owner of the REC can claim to have purchased "renewable energy". RECS can be registered, verified, aggregated, insured and sold, with the insured RECS commanding a premium.

Energy producers (buyers) are protected for compliance to state and federal mandates that energy producers generate various percentages, up to 33% renewable by 2020, of their energy from renewable sources.

The purchase of RECS can be utilized by energy producers to comply via credit-offset their energy sales. There are financial and production related penalties for not achieving targets.

The buying, selling and trading of RECS, driven to a large degree by requirements to increase renewable energy sources, represent a market of approximately \$1 Billion at this time, with reports that the REC trading market is anticipated to double to \$2 Billion over the next 5 years.

Recommendation

Targeted customers for LEED, RECS and Carbon are Utilities, Commercial Real Estate Developers, Owners, Buyers, Lenders, Investors, Private Equity, Utility Companies, Agents, Brokers, Energy Auditors, Certifiers and Registries participating in the purchase, sale, retrofitting and financing of commercial properties.

The recommendation is for a capitalizing an entity responsible to evaluate, identify, develop and implement environmental insurance initiatives and the related revenue projections and implementation costs. The initiatives relate to the current international movement to reduce Greenhouse Gas Emissions (GHG) and increase energy efficiency.

A new industry standard is primed.

Primary issues for examination are product development, capital requirements, data sources, technology, regulatory considerations, management capabilities, marketing expertise and distribution channels.