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## **Bridging the funding gap with renewable energy incentives in a non-traditional way**

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As in most businesses, real estate development professionals want to maximize their return and minimize their risk and upfront commitment of time and money. In this regard, non-traditional project elements such as the use of renewable energy or other greenhouse gas emission (GHG) reduction technologies may be difficult to justify without some form of external funding.

Owners and developers should be aware of the numerous state and federal renewable energy development incentive programs that are available to them. External funding mechanisms exist in the form of tax credits, grants, low-interest loans, rebates, and Renewable Energy Credits (RECs) (a credit earned for each megawatt (MW) of renewable energy produced from a qualifying fuel). With the enactment of Renewable Portfolio Standards in 42 states over the past decades, including all of the northeast states, the presence of a REC line item has become commonplace in renewable energy project budget calculations.

Less frequently considered, but potentially of significant value to a project, are carbon offsets to reduce GHG emissions. The value of the sale of offsets to project capital costs or annual income from voluntary emission reductions can make a project a win-win for the environment and for the financial bottom line. But a number of questions need to be answered to determine if GHG emission reductions make a project more viable.

A carbon offset is a financial instrument representing a reduction in GHG emissions. The term "carbon" is widely used to collectively refer to the six primary greenhouse gases. Although greenhouse gases are essential to maintaining the temperature of the earth, an excess of greenhouse gases can raise global temperatures to unhealthy levels. As a result of the burning of fossil fuels, the presence of the gases has become a major concern in the contributions to global warming.

In the US, federal legislation establishing a GHG emission cap and trade system appears to be on the horizon. Three bills pending before Congress, including the Lieberman-Warner Climate Security Act (S.3036), create a U.S. cap-and-trade system to be implemented by 2012. The presidential candidates support such a system and suggest GHG emission reduction goals of 60% (McCain) and 80% (Obama and Clinton) below 1990 levels by the year 2050.

Regional initiatives in the US have already enacted GHG legislation. In the Northeast, the Regional Greenhouse Gas Initiative (RGGI) has grown since 2005 to a coalition of ten states (ME, NH, VT,

MA, RI, CT, DE, MD, NJ and NY) that share the common goal of reducing carbon dioxide emissions by 10% by 2018 through a cap on large (>25MW) power generating plants starting in January 2009. The proposed federal system and all of the state systems do, or are expected to, recognize carbon offsets for emission reductions produced by non-regulated entities.

Voluntary emission reductions (VERs) that cannot qualify as carbon offsets under these programs, are traded on the voluntary carbon market. The voluntary carbon market is divided into two components: the Chicago Climate Exchange and the voluntary offset market. The Chicago Climate Exchange is a structured and monitored cap-and-trade system that organizations voluntarily join. The voluntary offset market includes a wide array of international carbon transactions that are not driven by the existence of a cap and typically do not trade on a formal exchange. In 2005, transaction values on the global voluntary carbon market totaled \$41 million. In 2007, the market was worth \$331 million. This increase in value is in part a reflection of confidence in the present market and its future.

Today, environmental asset management companies assist project developers in identifying environmental assets, quantifying emission reductions and their market value, compiling information required by the carbon offset buyer, project marketing and carbon credit sales. To sell the carbon offset at the highest price, voluntary emission reductions must qualify for standards such as the Voluntary Carbon Standard or the Clean Development Mechanism Gold Standard. Projects must pass the "additionality" test, the demonstrated ability to reduce emissions beyond levels that would have otherwise occurred. Buyers are looking for carbon offsets generated by projects or technologies that are "beyond business as usual".

The most common credit-producing project type is renewable energy, such as wind farms, biomass energy, or hydroelectric dams. Other common sources of offset credits include energy efficiency projects, the destruction of organic byproducts, and the destruction of landfill methane. Some of these project types can also generate multiple assets, such as a landfill project where methane is combusted earning the project carbon offsets, and energy is generated for the grid earning RECs. If you are trying to implement greener projects by incorporating some of these non-traditional elements, Tighe & Bond may be able to help you find ways to bridge the funding gap by assessing the feasibility of obtaining renewable energy development incentives.

Amy McDonough is senior environmental scientist, and Rebecca Sherer, P.E., is an associate at Tighe & Bond, Inc., Westfield, Mass.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540