

“Going Green Gaining Popularity Throughout the Virgin Islands”

By Tom Bolt

“Environmental thinking is no longer the purview of isolated, far-left thought,” General Electric CEO Jeffery Immelt recently told a crowd at the Massachusetts Institute of Technology. “It is now a mainstream economic discussion.” Indeed, from Wall Street to Hollywood, from San Juan to Charlotte Amalie, terms such as “global warming” and “sustainability” have entered our everyday dialogue and more than ever, consumers are gravitating towards businesses with green policies. At the same time, businesses are discovering that short-term investment in green technology pays off in the long run.

While much of the environmental discussion revolves around alternative energy and hybrid cars, real estate companies play a vital role. According to the United States Green Building Council (USGBC), buildings account for 65 percent of electricity consumption and 30 percent of greenhouse gas emissions, raw materials use and waste output. Needless to say, there is room for improvement. As public awareness grows, attention will focus on which real estate entrepreneurs are reducing their environmental and energy footprint. This article discusses how real estate firms can begin to go green.

1. Avoid Environmental Liability

A U.S. Environmental Protection Agency (EPA) suit can be a public relations nightmare. Real estate companies should protect themselves against three common environmental enforcement actions. First, whenever purchasing property, firms should hire an environmental professional to conduct a Phase I Environmental Assessment consistent with the current standards. Saving a few thousand dollars by relying on an old and possibly inaccurate Phase I is simply not worth the financial risk. Second, developers of an acre or more must obtain a storm water permit under the Clean Water Act. The permit requires developers to prepare and implement pollution prevention plans that curtail erosion. The Virgin Islands Department of Planning & Natural Resources and its Coastal Zone Management Division are stepping up enforcement actions against lax developers. Third, developers should think twice about building in wetlands, another favorite government target. While wetlands mitigation projects are possible, they can be very expensive.

2. Green Buildings

Though green construction has traditionally driven up costs, USGBC estimates that going green increases expenses by only about two percent. Financial incentives along with energy savings more than compensates for this small increase. For instance, the federal Energy Policy Act of 2005 provides a tax deduction of up to \$1.80 per square foot for new commercial buildings that reduce energy use by 50 percent using the 2001 ASHRAE standards as a baseline. Existing buildings can earn a deduction of \$1.20 per square foot for upgrading lighting and HVAC systems.

Recently, the Friends of the National Park announced their Green Building House Tour which will feature two or three homes. Although green building is a buzzword now, many people do not have a full understanding of the term's meanings. Kristen Maize of the Friends of the Park said. she expects the new Tour to be an interesting session. Although green building is a buzzword now, many people do not have a full understanding of the term's meanings. "You don't always realize there's many types of green building - you don't have to live in a shack," she said.

For almost a decade, the USGBC has implemented its Leadership in Energy Design Rating (LEED), which evaluates the environmental and energy qualities of real estate. Ratings range from LEED "certified," to silver, gold and platinum categories. As of late 2006, only 15 buildings earned the LEED platinum rating, one of which is the Center for Green Technology owned by the City of Chicago. The Center, located on a former dumpsite west of downtown, offers several free seminars every week addressing how to incorporate environmentally friendly, cost-saving features into residential, commercial and industrial buildings. Many cities as well as companies such as Ford, Bank of America, Sprint and Toyota incorporate LEED standards in their buildings, which include the following goals.

A. Design for Sustainability

The location, layout, and features of real estate have a significant influence on energy use. Building in urban areas near public transportation reduces energy dramatically by lowering commuting energy costs. Simple steps such as planting trees in parking lots provides shade that keeps the lots cool, reduces hydrocarbon emissions from gasoline evaporation from leaky fuel tanks, and lowers asphalt maintenance costs.

Stanley Selengut of St. John's Maho Bay Campgrounds, is a father of sustainable design. "He helped put us on the map with innovative preservation of natural resources." Virgin Islands Commissioner of Tourism Beverly Nicholson recently noted. Selengut has received numerous awards for his efforts, most recently the Pioneer Award at the International Society of Hospitality Consultants' 2008 Americas Lodging Investment Summit

B. Design for Water Efficiency

Landscape decisions have a huge impact on water use. Many sites capture rainwater for irrigation with roof systems or rain barrels. Some treat wastewater on-site for use in irrigation. Recently, Yale researcher Gaboury Benoit spoke to a packed classroom at the University of the Virgin Islands. He noted that while the Territory's development practices come under criticism, the Virgin Islands should be commended for its use of rainwater as a natural resource. The Territory, according to Benoit, is well ahead of most areas in the United States.

C. Use Recycled Building Materials

Developers should consider using building materials produced or manufactured nearby to reduce transportation requirements. Wood should come from Forest Stewardship Council-certified forests and developers should mine the market for reused materials and products. Selengut's Maho Bay Campgrounds has utilized lots of recycled building materials, such as "plastic lumber" and recycled glass tiles, in construction that also minimized removal of native plants. Elevated walkways prevent soil erosion and protect the beach and fragile coral.

D. Reduce Electricity/Energy Costs

Given that per capita residential energy use in the United States is more than double that of Europe and in the Virgin Islands even higher, there are many opportunities to cut electricity use. Substituting compact fluorescent lamps for traditional incandescent light bulbs saves close to 75% in electricity costs. The Virgin Islands Energy Office and the Water and Power Authority recently completed a program that gained the recognition of the U.S. Department of Energy. The two government entities helped local nonprofit agencies by distributing energy efficient fluorescent bulbs. Firms can purchase "Energy Star" certified products (a joint program of the EPA and the U.S. Department of Energy) and add insulation, reflective roof coating and green roofs to lower energy consumption. Proper fan systems drive down cooling costs substantially. Skylights and glazed windows that track outdoor brightness levels decrease energy requirements for lighting and cooling.

The Virgin Islands Energy Office is offering substantial rebates to residents who purchase energy efficient products from certified dealers throughout the Territory as part of its campaign to educate the public about ways to lower utility bills by using less power.

Through September 2008, the Virgin Islands Energy Office is offering two rebate programs - the Energy Efficiency and Renewable Energy Rebate Program and the Energy Star Appliance Program - to encourage the public to save energy by purchasing, for instance, solar or wind power systems and appliances with the Energy Star logo, according to Leila Muller, V.I. Energy Office Program Monitor.

E. Focus on Indoor Air Quality

Studies show a direct correlation between green buildings and worker health and productivity. Paints, carpets, and adhesives with low volatile organics improve indoor air quality, as do wood and fiber products containing no added resins. A recent OSHA conference sponsored by the UVI CELL Program noted that poor indoor air quality is one of the most important health issues we face today and has been the concern of several Virgin Islands public schools. Molds and fungi are found in virtually every environment and can be detected, both indoors and outdoors. Installing windows that open and other natural ventilation systems are also key in improving the indoor environment. New

HVAC systems prevent intrusion of air pollutants, and companies are installing air quality and humidity monitors to insure clean and healthy air.

3. Become Carbon Neutral

Many companies are offsetting their own emissions of carbon and other gases widely believed to cause global warming. While real estate firms do not generate direct emissions by manufacturing building materials, they do cause indirect emissions through office electricity use and corporate travel. Several organizations publish equations in which companies can input such factors as electricity bills and car mileage to calculate their own carbon footprint. To offset these emissions, real estate companies can support projects such as wind power, solar generation and growing trees, all of which reduce carbon emissions.

The plans have the potential to be replicated elsewhere, according to Virgin Group billionaire Sir Richard Branson. "I would love to see the Virgin Islands become the first carbon neutral country in the world. I think economically they would benefit from becoming the first carbon neutral islands. We've got plenty wind, sun, and wave power," he quipped to *The BVI Beacon*. To do so, Sir Richard has hired experts on renewable energy like Daniel Kammen, a professor at the University of California Berkley Energy and Resources Group. Dr. Kammen noted the advantages of using alternative energy here. "The BVI is the best place to do this," he says. "It's got 1000 square meters of solar energy and the wind is over 16 knots an hour, so why not use it?"

To Dr. Kammen, the British Virgin Islands could actually make money by turning to renewable energy that would allow it to sell carbon credits in Europe and fuel to the U.S. Virgin Islands.

Conclusion

The Virgin Island public's growing concern for environmental issues presents a great opportunity for innovative real estate companies. Firms that follow GE's lead and make the small investment it takes to go green will reap huge benefits in the future. In this era of *An Inconvenient Truth* and the Toyota Prius, more consumers than ever will choose companies that provide not only a firm handshake, but also a solid environmental footprint.