

#### POSSIBLE HEADLINES

##### **A New Climate for Maryland Businesses**

How greening your office can mean more greenbacks for your business

##### **A New Climate for Maryland Office Space**

Planting the seeds of a green office pays off in more ways than one for area businesses.

##### **In Search of Greener Pastures**

Area businesses are moving towards more eco-friendly office spaces—and reaping the rewards in more ways than one.

##### **A Greener Climate for Maryland Offices**

With Maryland ranking as the fifth-greenest state in an October 2007 survey by *Forbes* magazine and more consumers seeking out environmentally-responsible suppliers, it's no wonder so many area businesses either already employ green measures or are considering implementing them.

##### *Green light for green offices*

According to the U.S. Green Building Council, buildings account for 65% of American electricity consumption and 39% of all CO<sub>2</sub> emissions. By using green or sustainable methods to build, operate or renovate office buildings, there are tremendous benefits for the environment, economy, and general well-being of the community. Those benefits range from protecting ecosystems and conserving natural resources to reducing operating costs and improving employee health and productivity.

In the ecologically-supportive mid-Atlantic area, there are also a number of local grant opportunities and tax incentives available to businesses that employ green measures such as solar panels and other devices designed to improve energy efficiency.

The building and design industry term for green initiatives like these is “sustainable design.” The American Institute of Architects’ Committee on the Environment defines sustainable design as “a collaborative process that involves thinking ecologically—studying systems, relationships, and interactions—in order to design in ways that remove rather than contribute stress from systems.”

What does all this mean for your business? This article explores the answer, whether you're considering large-scale construction of new offices or just looking for small ways to be more green.

##### *No greenhorn to the green movement*

When Michael Furbish bought an old Maryland farmhouse near the Chesapeake Bay in 1999, he never dreamed it would lead him to national media exposure and ultimately, a new career. But following a chain of events that began with the realization that the

existing derelict building was a total loss and ended with the construction of a new, highly “green” home that generated a flurry of unsolicited attention from public officials, institutions and national media outlets alike, Furbish began to realize that his small farmhouse renovation was just the tip of an iceberg known as the sustainable design movement.

So in 2003, the Harvard graduate and former Trammell Crowe developer started his own development company with a twist—an environmental focus. His gamble has paid off in spades: specializing in green building systems and sustainable real estate development, the Baltimore-based company’s revenue growth has exceeded 100% annually since the company's inception.

Furbish Company’s first major development venture is the new Lucky’s Warehouse office building on the Middle Branch River in Brooklyn/Curtis Bay, a three-floor, 18,000-square-foot building featuring a clean energy system that offers tenants energy cost savings of about 65 percent over conventional systems, according to Furbish.

When asked what sets Lucky’s apart, Furbish touts its simplicity. “Sometimes in the green movement, the tendency is to get carried away wanting to use every technique,” says Furbish. “We don’t force every green idea onto a building but only those that help the building perform better.” For Lucky’s, a building with “good bones” of 1920’s masonry and woodwork, the design preserves the warehouse’s original character while limiting the need for additional materials by using existing open floor plans, exposed rafters, masonry walls, concrete floors and nine-foot tall windows that flood the building with sunlight, reducing the use of artificial lighting.

#### *All systems green*

In addition to sustainable development, Furbish supplies and installs a variety of cutting-edge sustainable systems. While natural finishes and living roofs (vegetated roof covers that minimize “heat island” effects and help manage storm water) have become almost commonplace on new buildings, more recent innovations include vegetated retaining walls, which when grown out present a vertical vista of the green of the client’s choice—herbs, ivy, shrubs, or anything else that will grow in the area’s climate.

Perhaps the newest sustainable system Furbish offers is the interior “living wall” biofilter, a wall of plants that filter potentially harmful volatile organic compounds (VOCs) from indoor air. Furbish worked on the first known site featuring this system in Baltimore’s Hampden neighborhood, and he is quick to point out that even today there are fewer than 30 of these in place in the US, with two more under development by his firm.

Straw-bale structures are another Furbish specialty, learned first-hand from the construction of his Chesapeake Bay farmhouse home.

Furbish also offers design and installation of solar/geothermal HVAC systems that focus on heating and cooling a building’s mass and not just the air, yielding more efficient and

more comfortable climate control with no hot or cold air blasting out of vents. Furbish explains, “Materials like concrete and brick provide good thermal mass. Think of how cool the interior of an old cathedral is on even a hot summer day.”

As an industrial shell transformed into offices, the Lucky’s Warehouse office building is a textbook example of how these sustainable heating and cooling systems work. The building is heated with energy collected by rooftop solar panels. Those solar panels also provide the energy that warms or cools water flowing through hydronic tubing in the floors to heat and cool the building. When the sun is in short supply, a geothermal heat pump taps the heat stored beneath the earth’s surface.

### *Smaller scale greening*

Furbish emphasizes that many of the same sustainable systems can be employed on a smaller scale or as a retrofit versus new construction, although he cautions that this can involve additional challenges; for instance, not every existing roof can support the additional weight of a living roof.

And while Lucky’s Warehouse represents a large-scale, new sustainable design project, a recent *New York Times* piece pointed out that new sustainable design buildings “represent a small fraction of the nation’s estimated 4.5 million commercial properties, many of which were erected decades ago before sustainable, or green, designs became de rigueur. This vast stock of older buildings presents a much bigger opportunity to cut down on energy consumption and carbon emissions that contribute to the warming of the planet.”

One local business taking that message to heart is architecture firm Brown Craig Turner (BCT). When the firm needed to relocate from its Tide Point offices, management carefully considered the environmental impact of every element of the move, including location, materials, layout and processes for the new space.

The firm decided on its new location at One Charles Center in the heart of downtown Baltimore to help reduce the firm’s carbon footprint. According to BCT President and CEO Bryce Turner, “Most of our employees live closer to the new office, so they can walk, use mass transit or ride a bike to work.” Additionally, because the new offices filled empty space in an existing building, the firm was able to minimize materials used and avoid the negative impact of new construction.

The firm also sought out recycled and renewable materials for its new office interiors, including low VOC paints; 100% natural linoleum tiles that are completely biodegradable; “zero waste to landfill” carpeting that is reusable or recyclable; rapidly renewable, formaldehyde-free bamboo flooring; and other wood products from certified sustainable forests.

BCT’s green efforts didn’t stop with material selection. The firm’s designers also carefully considered how to layout the office to maximize the space’s 10-foot high windows, such as positioning the design studio on the north side of the building which receives full sun all day, thereby cutting back on the need for artificial lighting. And the

firm's commitment to the environment is carried through its operations, which include the use of compact fluorescent bulbs, letterhead printed on 100% post-consumer recycled paper, and paper recycle boxes at each and every desk.

The end result is as attractive as it is green. Deborah Fritz, an interior designer at BCT who worked on the new office design, says, "People think green buildings are industrial looking, but we were able to select unique and beautiful materials including countertops with reflective, recycled aluminum shavings and terrazzo flooring that mixes recycled glass, plastic and stone chips into a cement base for a stunning end product."

### *A greener future*

In the rapidly-growing world of sustainable design, new innovations appear on a daily basis. When questioned on future trends, Michael Furbish answers, "In every aspect of building we're going to see continued movement towards sustainability, from materials to processes. But right now the big gorilla in the room is energy and climate-control. We have been building without consideration of energy restrictions, but now the tides are starting to turn. We will see more people leveraging the sun and shade in how they orient buildings and applying these sustainable techniques to continue to improve energy efficiency and lower costs."

BCT's Fritz adds, "We are seeing new trends every day. At our project at The Town Center at Aquia in Stafford, VA, we are recovering materials from demolition, grinding them up and reusing them in the new construction as well as reusing existing trees and landscaping from the site."

In an era of major utility price hikes and gas prices approaching \$4 a gallon, it looks like going green may be one of the smartest moves your business can make. So whether you're building a new office, renovating an existing one or just looking to make small changes for the sake of the planet and your monthly bills, determine what is realistic for your business to do.

As Fritz says, "Every choice you make, no matter how small, can have a big impact." By updating old electronics to newer, more energy-efficient models, using local dealers for office supplies to minimize transportation costs and emissions, and even bringing plants into your office space to improve the air quality for your employees, you're helping to improve the environment—and your bottom line.

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### Additional Resources:

- **GreenSpec Directory:** The online GreenSpec® Directory lists product descriptions for over 2,100 environmentally preferable products. Products are chosen to be listed by BuildingGreen editors. They do not charge for listings or sell ads.
- **Green Building Pages:** Green Building Pages is an online sustainable design and decision-making tool for building industry professionals and environmentally and socially responsible consumers.
- **Green2Green:** Green2Green.org features comprehensive information regarding green building products, materials and practices. The site offers side-by-side comparisons of products using a variety of environmental, technical and economic criteria.
- **Oikos:** Oikos is a World Wide Web site devoted to serving professionals whose work promotes sustainable design and construction.
- **The Green Guide:** National Geographic's Green Guide offers staff-written reviews of a host of products, ranging from appliances, home furnishings and home improvement products to personal care and pet supplies.

- **Good To Be Green:** Good To Be Green is a directory of green building products, sustainable building materials and green building service providers. Products must: be made out of recycled materials; ensure a low environmental impact during the construction, operation and/or demolition of the building; conserve natural resources like energy, wood and water; and improve air quality.
- Treehugger.com: Tips for greening your workplace
- TheGreenOffice.com: Office supplies rated for their recycled content and renewability
- EnergyStar.gov
- GreenBuildingInstitute.org: Information on Maryland tax credits and available grants

#### Author's Sources:

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