# Building Green is Better

Have you been in a conversation recently where the terms "green building" or "building green" have come up?

**Building green** prevents pollution by incorporating principles such as minimal use of natural resources, site design that works with nature, energy and water savings, and improved indoor air quality. These factors combine to create buildings that are sustainable - meaning that how they are constructed will have less of an impact on our environment than those buildings that are constructed in a more traditional manner. Green buildings can be residential homes, schools, office complexes, shopping malls and factories. While initial costs of constructing a green building (or renovation of an existing building) vary, the overall savings over the life of the structure from conserving resources such as water and energy are quite significant.

Only a few new and existing commercial or institutional buildings in Connecticut come close to meeting established green building guidelines. There is movement to change that. The Connecticut Department of Environmental Protection's (DEP) Office of Pollution Prevention helped establish the Connecticut Green Building **Council (CTGBC),** a non-profit organization that since 2001 has been spreading the message that building green is beneficial to our health and our environment.

The CTGBC board includes representatives from the Connecticut DEP, dedicated design professionals, consultants and other state officials, who with the assistance of the CT Clean Energy Fund have been helping



New "green" science center planned for Western Connecticut State University

to educate design and construction professionals and the public about the benefits of green buildings. Seminars have been held on Leadership in Energy and Environmental Design (LEED) standards (training provided by the U.S. Green Building Council), renewable energy systems, and tours given to sites of interest in the state.

In addition to cost benefits, there are many environmental benefits of green buildings. One such benefit is a healthy indoor environment. According to the American College of Allergy, Asthma and Immunology, the average American spends more than 90% of their time indoors. By installing highly efficient ventilation systems, taking advantage of day-lighting, and using less toxic and environmentally preferable materials, green buildings are more comfortable to spend time in. An increasing number of case studies have shown that healthy indoor environments increase productivity in both employees and students.

Several of the state's universities and technical schools are planning to build green buildings. One such building is the new science center planned at Western Connecticut State University in Danbury (shown above), scheduled to be completed in the spring of 2005. A State of Connecticut Department of Public Works project, the building is designed to LEED standards, will have a high efficiency mechanical/electrical/ plumbing system and will make efficient use of the site for water retention and utilization. Extensive research was done on the environmentally preferable materials that will be used in the building. This information can be transferable to other buildings planned in the state.

There are several upcoming events sponsored by the CTGBC, including a workshop on low-impact development using new site development techniques, lighting design that works with LEED, and a conference on green, high-performance schools. If you are interested in attending any of these events, please visit their website at www.CTGBC.org.

# You can have a Green Building too!



#### RIDDLE: WHEN IS A BLUE HOUSE GREEN?

(Keep reading – the answer appears at the end of article)

If a place to live or work that is healthy, comfortable, durable, and resource efficient sounds appealing, **use the following green building design considerations** – whether you are constructing, renovating, or even looking for a house, apartment or other building.

#### The site should be environmentally preferable.



- Locate where you can take advantage of public transportation, biking or walking to basic services.
- Renovate an existing building it is more preferable than building on an undeveloped site.
- Situate a new building so that it benefits from existing vegetation and solar access.

#### The building should conserve water/energy.



- Install high levels of insulation, high-performance windows, compact florescent lights and other energy saving devices.
- Design the building to use solar heating and day lighting.
- Use low-flow showerheads and appliances that require less water, such as a front-loading washing machine.

## **Environmentally preferable construction** materials should be used.

- Choose durable products and materials that are low-maintenance.
- Use salvaged materials. Make sure these materials are safe (no lead or asbestos) and they do not waste water or energy (e.g., old windows and toilets).
- Use new materials with recycled content for construction (e.g., decking material made from recycled plastic and sawdust and floor tiles made from recycled glass).

#### Indoor air quality should be considered.

 Provide adequate ventilation to protect the occupants from indoor air pollutants such as radon and molds.

## Non-toxic materials should be used throughout the design and construction processes.

Find alternatives to paints, glues and wood preservatives that contain solvents and VOCs (volatile organic compounds). VOCs contribute to smog and can cause adverse health effects.

#### Landscaping should be beneficial.

 Use native plants that require little or no pesticides or watering and are easy to maintain.

**Answer to Riddle** (in case you didn't figure it out from the article): When you paint your house blue (or any other color) with low-VOC paints, it reduces the amount of harmful chemicals, protecting the environment and your health. It is one step you can take to make your home "green"!

### WHAT'S NEW IN P2

FROM THE CONNECTICUT DEP?

#### **Green Building Display**

The Connecticut DEP Office of Pollution Prevention has created a new tabletop display to educate viewers on the topic of green building materials. It shows a commercial building cutaway and indicates where various sustainable materials have been used in its construction.

This display is available for use at no charge from the CT DEP.
Please contact Frank Gagliardo if you would like to borrow the display at 860-424-3130.

To learn more about green building, check out these websites:

www.nesea.org/buildings/info

www.ecohome.org

www.buildinggreen.com

www.epa.gov/reg3p2p2/ building.htm

The above listing of websites is provided to you as a public service and does not constitute an endorsement by DEP.

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## Saybrook Point Inn, Marina & Spa Keeping the Environment in Shipshape

#### Repeat Winner of Connecticut DEP's GreenCircle Award

Picture yourself at the Saybrook Point Inn, Marina & Spa – walking along the beautiful Connecticut shoreline while taking in a breath of salty sea air, watching the colorful boats docked nearby and listening to the cries of the seagulls overhead. Or maybe you are more of the indoor type, taking in views of the Connecticut River from your elegant room or pampering yourself in the spa with a massage or facial. Either way, what you probably didn't know is while you were shaping up or shipping out, the folks at Saybrook Point Inn were busy thinking up new ways to protect the environment and keep their guests happy.

The Inn, an 80-room facility in Saybrook, is a **four-time** winner of the Connecticut DEP's GreenCircle Awards (see side box). The Inn's first award in 1998 was for enhancing and preserving the Saybrook Point waterfront by creating walkways (open to the public) along the water that stabilize and preserve the waters edge and shore areas. The following year, in 1999, the Inn won for purchasing water-efficient toilets for guest rooms and public areas and installing a water efficient dishwasher. These changes reduced their water usage by 15%. In 2001, the Inn integrated new equipment that treats water going through their cooling tower. The system uses less water and eliminates disease-causing bacteria and algae growth without the need for chemicals. Saybrook Point Inn also installed ninety energy saving programmable thermostats. Winning again in 2002, the Inn installed water recycling laundry equipment with ozone to reduce hot water, soap, bleach and propane usage. Besides the environmental benefits, the finished laundry is now softer and has a more pleasant fragrance.

Why do they do it? Innkeeper Stephen Tagliatela says: "It's the right thing to do for the environment and the right thing to do for business. Being "green" can be profitable. Most people don't think that. It's even patriotic. Why waste energy?" Tagliatela also said it was important to maintain a high level of service for their guests. He says in many cases, the guest's experience has been enhanced because of their pollution prevention efforts. For example, more efficient T-8 florescent bulbs were installed with the bonus of providing more natural light. So guests can enjoy being "green" without looking green.

In addition to receiving the awards for the facility, Innkeeper Stephen Tagliatela has been nominated individually for the next DEP GreenCircle Awards coming up this spring. He has volunteered a significant amount of time to serve in an advisory capacity to the DEP in developing Connecticut DEP's Clean Marina Program. The

members of this advisory group reviewed the contents of Connecticut's Clean Marina Guidebook, ensuring that the document meets the needs of Connecticut's marinas, and, as a result, supporting the program's success. The industry perspective provided by this group of volunteers proved invaluable to the DEP's Office of Long Island Sound programs in developing the guidebook. The result of the group's hard work and perseverance is a cross-media compliance and best management practices guide for the state's inland and coastal marina operators, which provides the basis for the DEP Clean Marina Program.

The Saybrook Point Inn, Marina and Spa is a great example of how businesses of all kinds can make significant contributions towards improving Connecticut's environment while preventing pollution, enhancing the bottom line, and providing first-class services to their customers. Customers can also feel good about where they are spending their dollars, knowing that the business has made it their business to protect our environment. What's next on their environmental to-do list? The Saybrook Point Marina was the first to apply for the DEP's new Clean Marina certification and hopes to have it this spring.

#### DEP GreenCircle Awards

The DEP established the GreenCircle Awards Program in 1998 to recognize businesses, institutions, individuals and civic organizations who have undertaken voluntary environmental projects that contributed to or improved the quality of the environment for the State of Connecticut. Many projects have included pollution prevention, waste reduction or other projects promoting natural resource conservation and environmental awareness. To date, more than 500 awards have been granted for over 700 projects.

For more information about the GreenCircle Awards Program, contact DEP's Office of the Ombudsman at **860-424-3003 or visit the DEP website at www.dep.state.ct.us/pao/grncrc/greencircle.htm** 

For more information on **Connecticut's Clean Marina program**, contact Elke Sutt, Office of Long Island Sound Programs, at **860-424-3034**.

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## P 2 C A L E N D A R

#### A SELECTION OF P2 RELATED EVENTS

**APRIL 5, 2003** 

#### Healthy Environments in Connecticut Schools Conference: Hartford, CT



The quality of the indoor air in schools is critical to the health of students, school staff and to effective teaching and learning. Workshops will be relevant to superintendents, Board of Education members, principals, teachers, parents, school nurses, municipal leaders, school architects, buildings and grounds personnel, and local health departments. Sponsored by the CT School Indoor Environment Resource Team (includes the CT DEP) and EPA. For more information, contact Mary Beth Dufresne at 860–525–5641 marybeth@cea.org.

## APRIL 9, 2003 ISO 14001 Strategic Environmental Management Seminar: Hartford, CT

Learn how conforming to the ISO 14001 standard can help your company remain competitive in the marketplace. Sponsored by CT DEP, CONNSTEP, Pratt & Whitney, UTC and EPA. For more information, contact Judy Wlodarczyk at 860–644–9718 or visit www.connstep.org.



#### APRIL — OCTOBER 2003 Bicycle to Work Breakfasts: Old State House, Hartford

Starting on Friday. April 25th and continuing through the last Friday of each month through October, bicycling commuters can get a free breakfast and register for prizes. Sponsors include the Capitol Region Council of Governments, American Lung Association, CT Departments of Public Health, Environmental Protection and Transportation, ALL ABOARD! and CT Bicycle Coalition. For more information and to connect with others who commute by bicycle in your area, visit www.crcog.org or contact Sandy Fry. CRCOG, at 860–522–2217.

#### P2 Lecture Series

#### DEP sponsors a monthly lecture series on pollution prevention topics.

Lectures are free, open to the public, and are held from 11:00 a.m. to noon in the Phoenix Auditorium, DEP Building, 79 Elm St., Hartford. For additional information, contact Lynn Stoddard at 860-424-3236 or go to http://dep.state.ct.us/calendar/calendar.htm.

April 29, 2003: Fresh Fish and Seafood —
How to Choose Wisely.
Brian Toal, Connecticut Dept.
of Public Health.

May 7, 2003: Constructed Wetlands for the Removal of Low-Level Metals.
Steve Bennett, Manager of Environmental, Health & Safety for

UTC Fuel Cells.

June 19, 2003: Choosing Greener Transportation — Hybrids, Alternatively Fueled
Vehicles, and Fuel Cells. Nancy Hazard, Director Transportation
Programs, Northeast Sustainable Energy Association.

July 17, 2003: Promoting Green High Performance Buildings in Connecticut.

Kim Trella and Frank Gagliardo, CT DEP.

#### APRIL 12, 2003

#### Smart Growth Hartford Training Series: Hartford, CT

Workshop participants will learn how to use a "Smart Growth Scorecard," read a site plan, advocate for zoning alternatives, and design better parking. For Hartford neighborhood groups. For more information: contact Mary Sherwin, CT DEP at mary.sherwin@po.state.ct.us or 860-424-3246.



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Arthur J. Rocque, Jr., Commissioner

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For a free subscription, please contact Judy Prill at (860) 424-3694 or e-mail your request to judith.prill@po.state.ct.us. If you want to save paper and postage by reading the P2 View electronically, you can either subscribe to the listserv or view it on-line (see www.dep.state.ct.us/wst/p2/).

P2 View is published by the Connecticut Department of Environmental Protection, Office of Pollution Prevention. Editor: Judy Prill; Contributors; David Westcott, Nan Peckham, Kim Trella, Mary Sherwin, Lynn Stoddard and Connie Mendolia.

Publication of this newsletter is funded by a grant from the U.S. EPA.

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