## GreenBuilding

## Build green: Save money

by Elizabeth DiSalvo

What are we talking about when we talk about green building?

We all know the basics: recycle, turn the heat down, install cfl light bulbs, use novoc paint. Many of us even know that the first, and best, thing you can do to make

a house energy efficient is to add insulation and address air leaks in the building envelope. But let's take it to the next level.

Besides the obvious

Besides the obvious goal of making the planet a healthier place that our grandchildren can also enjoy, what are the real goals of building green?

In the next few months we will take you through my top 3 goals

of building green. Saving money, Health and Happiness. This month, let's look at saving money.

#1 To Save Money. Saving money comes in many forms. You can save money on:

•Construction and materials costs. Most green homes use better (more expensive) insulation and windows, but they often use smart farming which involves less lumber; they also have much smaller HVAC equipment so they save a lot of money in those



Elizabeth DiSalvo and her firm Trillium Architects created this open dining area for a small house in Darien. The entire first floor has an open flow with designated areas defined by built-ins and window placement. Creative design means getting more out of building less. Photo by Catherine Lawton of Kelly Associates/Coldwell Banker Real Estate.

locations. Green homes also tend to be smaller and more thoughtfully designed, so there isn't a lot money wasted on spaces that are never used.

·Operational costs like heating and cool-

ing. This means saving energy. Most of the houses we built will use only 20% to 50% of the energy that a comparably sized home in Fairfield County will use. Clients are amazed by the small bills they get monthly.

 Maintenance costs. Building green means building quality. Thoughtful, quality building just adds up to less deterioration and building failure. Green homes with great building envelopes (the outer shell



Elizabeth
DiSalvo
Trillium Architects

of the house) have basically no water damage, no mold and mildew. We generally use materials that are appropriate to their environment and naturally last without repainting or re-treating.

The goal of green building is to save money in all three places. But as a wise man once said, you can generally only have two out three. Green building definitely strives to achieve #2 low operational costs and #3 low maintenance without going too overboard on #1. Yes, the upfront costs may be a bit higher. I say may be a bit higher because - especially in Fairfield County - someone's kitchen countertop can easily cost more than all of the energy efficiency and sustainable add-ons for a house put together. Did someone say payback? We have built very green homes for a much better per-square-foot cost than most quality homes in Fairfield County. It is really about prioritizing and working with the right trades people.

Overall, if you build a green home you are looking at a lifetime of extremely low operating costs and extremely low maintenance costs.

Never mind the savings, imagine the pleasure in that. It's like me with my 100%

electric car. To make my car go, I spend about 25% of what I used to spend on gas, and I never have to go to a gas station. Ever. And the maintenance on my engine is basically zero. I just have a lot of spare time!

Imagine having a house that needed almost no maintenance! Green technologies make that a reality. Imagine not having the pressure of large monthly heating and cooling bills and unexpected maintenance bills. Imagine the money and time you save and the fun things you could do.

Next month: Goal #2, Occupant Health!

Elizabeth DiSalvo, of Trillium Architects, is a residential architect with over 25 years experience. She met Mike Trolle, owner of BPC Green Builders (the contractor who has invited her to share this column) about 14 years ago when they were the only architect and builder in Fairfield County that a client could find who knew how to 'build green,' according to Elizabeth. She is proud to say that after years of uphill struggle, the green residential market is thriving. Please feel free to email any thoughts or questions to Elizabeth@trilliumarchitects.com or visit Trillium Architects at www.trilliumarchitects.com.