Planning a 'green' dream house

WENDY SKINNER/GUEST COLUMNIST

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I live in a downtown house that was built more than 100 years ago. My husband and I bought it for its old-fashioned charm, and because we thought we could afford it. Seven years later, I still love the house and my neighborhood and the fact that I can walk to work or to shop — but I see now that some of the old-fashioned things about my house are not charming at all.

The inefficient natural gas furnace (it once burned coal) is gobbling up a non-renewable energy resource and emitting greenhouse gases. The insufficiently insulated walls and loose-fitting old windows are leaking heat. A huge tank sits in the basement maintaining heated water 24 hours a day. The meters that measure our energy consumption spin inexorably forward, and a sizable percentage of our labor goes to pay for it.

I have had to acknowledge that my personal choice of housing — while driven by market forces, availability, and conventional thinking — is not sustainable.

I am far from alone. Almost none of us are living in a way that is sustainable. The costs — to the planet, our health, and our pocketbooks — of the predominant means of energy production and consumption are already high and going higher.

Buildings and the building industry are major contributors to climate change. According to the U.S. Green Building Council, buildings in this country account for 36 percent of our total energy use, contribute at least 30 percent of greenhouse gas emissions, use 30 percent of our raw materials and generate 30 percent of the nation's waste.

My personal reaction to an unsustainable living situation is to plan my "green dream house." This is a house that will fit my family's needs and budget, will use energy efficiently and won't occupy more land or require more public infrastructure than is necessary. It will be quiet and comfortable. It will be located in a community and will be within walking distance of basic services.

My green dream house has large south-facing windows, with a generous overhang of roof, providing me with "passive solar" heat in the morning and evening, and shade in the afternoon. Photovoltaic panels on the roof supply much of my electricity. It has a geothermal heat pump. It is extremely well-insulated. Hot water is produced by an on-demand water heater, and the appliances are all energy-efficient. It has a system to collect rain water and use it to irrigate my small vegetable garden.

The hardwood floors are bamboo, a fast-growing perennial that can be sustainably harvested. My lawn consists of a dense, springy ground cover and perennial plantings that attract birds and butterflies. The house incorporates design features that will make it suitable for me and my husband when we're a lot older, or if one of us becomes ill or disabled.

How realizable is this dream? Finding a readymade green home today is unlikely. Most new residential and commercial construction is not "green." It continues to adhere to conventional building techniques and use materials that consume non-renewable resources.

So I am saying, "If you build it green, I'll buy it." The problems of competitive pricing, contractors and installers who don't yet employ green building techniques, and high up-front costs for renewable energy systems are surmountable. Ithaca's Green Building Alliance and many others are promoting solutions.

The viability of sustainable building methods will become more evident with what promises to be Ithaca's most aggressively green building project ever. Ithaca College's proposed new business school will meet the highest standards of sustainability in construction, operation, and maintenance. It will cost less to heat, cool, and light and will pollute less because it will consume less energy.

Many other cities and communities have already embraced the green building concept. Portland, Ore. leads the way with 30 officially-registered green buildings. The city government in Portland requires green building methods for its municipal facilities and for all private construction projects — including affordable housing — that use public funds.

Cities like Chicago and San Diego are declaring their intention to become the "greenest cities in the country" not only to stem degradation of the environment but as a marketing tool to attract new businesses that will in turn attract young, educated workers.

Tompkins County has the talent and local expertise to become a leader in green construction, business growth and lifestyle. To join an ongoing conversation on the many ways we can become a more sustainable community, you are invited to visit any or all of the "sustainability salons" that are happening right now around our county. The salons offer opportunities to gather with others to talk about sustainability in all areas of our personal and community lives.

This week's topic is green building and responsible construction. The salons are a project of Sustainable Tompkins, which has gained the support of Ithaca College, Park Foundation, Cornell University, and various local businesses and organizations.

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Skinner is a member of the Sustainable Tompkins Coordinating Committee.

Sustainability Salons

This week's topic: Green Building

- 5:30-7 p.m. today at Rogues Harbor, 2079 E. Shore Drive in Lansing.
- 5:30-7 p.m., Tuesdays through May 4, Gimme! Coffee, 506 W. State St., Ithaca
- 5-6:30 p.m. on Wednesdays through May 5 at Juna's, on The Commons.
- 7-8:30 p.m., on Thursdays through May 6 at WowNet Digital Cafe, 111 N. Aurora St., Ithaca.
- 7:30-9 p.m. on Thursdays through May 6 at Simply Red Bistro, 53 E. Main St., Trumansburg.