

JULY/AUGUST 2012

# Renovation CONTRACTOR

THE  
*Green*  
ISSUE!

Philip Barton (and friend),  
Kinswater Construction,  
Toronto



**FEATURING:**

The Latest Eco-friendly Building Products  
Is it Green, or Greenwashing?  
Sustainable Landscaping Solutions

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# Green Home Dream Home

BY IAN H. BURNS

With two decades of sustainable building under his belt, Kinswater Construction's Philip Barton was the man for the job when a TV host came calling »





**Kinswater Construction's Philip Barton**  
This open-concept kitchen may appear to be white, but it's actually green to the core.



**John Bell**, host of HGTV's *World's Greenest Homes*, says sustainable building is a niche market that requires a contractor with creativity and competence.

**From the curb, John Bell's home doesn't look much different from the other nicely renovated 40-year-old houses in his north Toronto neighbourhood.** It's only when you step back 500 feet and notice the

solar panels on the roof that you realize there's a lot more to his house than meets the eye.

Bell is the host of HGTV's *World's Greenest Homes* and, when it came time to renovate his own house, he wanted it to live up to that title. To help him do it, he

called in Philip Barton of Kinswater Construction.

"I've worked with Philip in the past and know that his attention to detail and work ethic are essential to a successful sustainable building. It's a niche market that requires a contractor with creativity and

competence," says Bell.

For Barton, working on a renovation for a green-building guru like Bell was an opportunity to gain further insight and experience with new sustainable technologies. "John's renovation was structurally complex, and it incorporated many sustainable technologies. The difficult thing was knowing what needed to be in the wall before you close it up."

If Kermit the Frog thinks it isn't easy being green, he should try being a contractor. When it comes to green building, Barton finds the greatest challenge is the murkiness around defining

Photos: Johnny Lam



## » COVER STORY «

green and sustainability. "It's tough because 'green' is an ambiguous term, it's open to interpretation," states Barton.

And he's right; in Canada, we tend to use both green

and sustainable to define planet-friendly building. We use green for products and technologies, while sustainable addresses planning, material sourcing, and site management. In the U.S., on

the other hand, matters are simplified by using green as a blanket term to cover energy efficiency and sustainability.

There's no doubt that being green takes some getting used to. Barton has been applying the principles of energy efficiency since graduating from trade school in the era of the R2000 home. And though that training gave him a handle on the building envelope, it's the sustainable practises that he's had to develop over the past 20 years. Barton remembers his first meeting with a potential client's

architect who specialized in sustainable building: "He wanted us to take down the existing structure by hand and recycle as much material as possible. I commented that we could take out the things that were important, see what Habitat for Humanity wanted, then bring in the high hoe and have the building gone in three or four hours. I lost that job." Lesson learned.

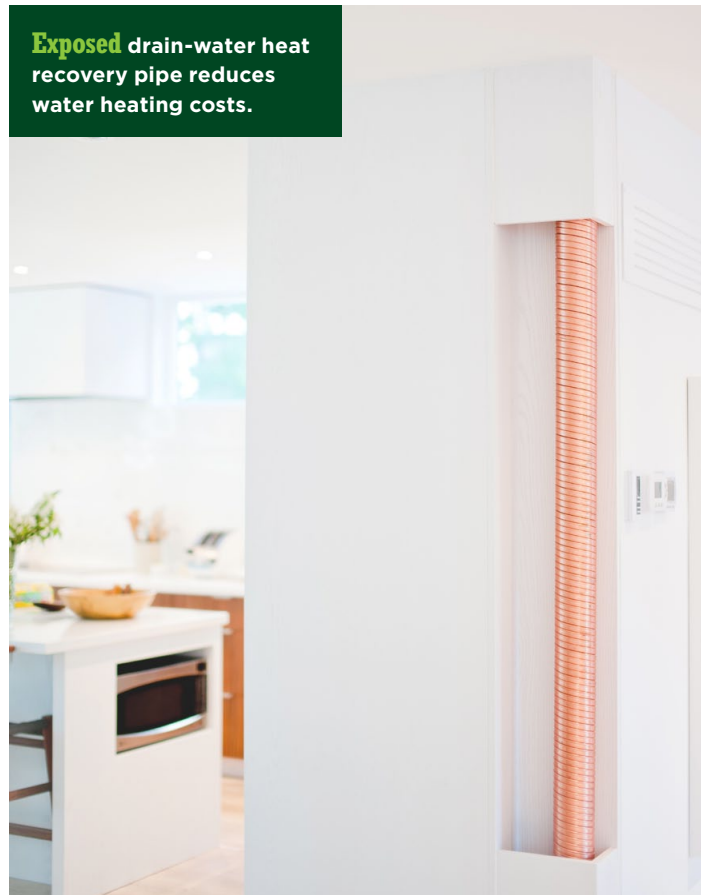
The reality is that contractors are usually the last to be hired, which puts them in a difficult position because the homeowner has their heart set on the

### The Bell Curve

**How the host of HGTV's *World's Greenest Homes*, John Bell, saves his green by being sustainable. Here are the top 10 eco-friendly additions he made.**

1. Reuses shower and bathwater (a.k.a. grey-water recycling) to flush toilets conserving nearly 100,000 litres of freshwater – and saves \$270 on the utility bill – annually.
2. A Power-Pipe drain-water heat recovery system captures the energy of warm shower water and preheats water entering the water heater (photo at right).
3. The insulation in all walls was upgraded. The garage was sprayed with water-based ½-pound foam. The 2x6 walls in the addition were filled with R22 Roxul batts, plus R4 exterior sheathing. Pre-existing construction bumped up to R22 with Roxul R8 and R14 batts. Below-grade, Roxul drainboard and batts used for a combined R32.
4. Installed an extremely efficient high-velocity air handler with indirect storage tank and tankless condensing boiler.
5. On sunny winter days, the second floor is completely heated by the sun.
6. The 1.5 kWh PV solar panels are connected to the city's electrical grid, netting Bell about \$940 per year in savings.
7. Windows are Low E3 on southern exposures and Low E2 for all other elevations.
8. Appliances are Energy Star-rated.
9. Hardwood flooring was sustainably harvested.
10. Walls painted with Boomerang-brand recycled paint. —IHB

**Exposed drain-water heat recovery pipe reduces water heating costs.**





**Green systems and green cisterns work in tandem to reduce the home's carbon footprint.**

## Fast Facts

- Company name:** Kinswater Construction
- Location:** Toronto, Ont.
- Specializing in:** Residential renovations
- Number of employees:** 5
- Gross revenues (2011):** \$1.8 million

design and are shocked when the reality of cost is presented. The relationship between the designer, client, and contractor has always been volatile, with the latter needing to balance the vision of the design team and the budget of the client. (For

advice on minimizing those conflicts, stay tuned for our September/October issue.)

The renovation business is competitive, which for many contractors means finding a niche, such as green building. For Barton, it's his willingness to learn from experience that has made Kinswater Construction a success. He doesn't market Kinswater as an exclusively green builder. "We're a quality builder-renovator specializing in difficult designs. Though I can honestly say that 100 percent of our jobs have a green component,

**Now we're cooking:  
Patsy Bell gets down to  
business in her new white-  
walled green kitchen.**

everything we're doing is trying to create better efficiency in all our renovations, with about 40 percent of our jobs having LEED, HERS, or EnerGuide certification." (See "Credible Qualifications," page 24 for more on these terms.)

Anyone can claim to be a green builder and many are legitimately doing it well, but Barton knew the success of his business would be determined by his philosophy to be "upfront, honest, and straightforward" with his clients. "The amount of transparency that I give is way more detailed than most contractors," says Barton.

"My driving force has always been, how much do you want to do? How much are you willing to pay? And how many green elements can we incorporate and stay within your budget? That's why I have a full-disclosure budget, and I bill my clients every two weeks," he explains. "I present them with all the new invoices along with an up-to-date budget, so they know exactly how the job is trending. It's a ton of extra hours for me, but at the end of the day I've taken the surprise factor out and they can never say to me, 'I had no idea when we







**Family planning:** The Bells' home combines a curant styling with green technology for the future.

large sections of the solid masonry exterior wall while maintaining the existing roof structure. "We needed multiple steel beams, columns, and a moment connection to achieve the open concept design," recalls Barton. Then came the sustainable technologies. (See "The Bell Curve," page 48 for details.) Like most renovations, the complicated aspect comes with retrofitting and combining the old with the new. "You've got to make the impossible possible," says Barton. And when you stand back and look at the house, sometimes, "it's all about what you can't see." **IC**

**Ian H. Burns** is *Renovation Contractor's* Tool Editor.

started we were going to end up here." It's the best remedy for dealing with designers and architects, feels Barton. "Sometimes the architects and the designers get more caught up in their vision of the design and they stop listening to the client's budget. I'm the reality check."

Transparency certainly helps build a trusting working relationship with Kinswater clients, but it's Philip's work-life balance that has enabled him to

have dedicated employees with his same work ethic. "Weekends are for family. My clients know that most of my guys have young families and we don't work on the weekends. I've worked enough weekends in my life to learn that it doesn't always benefit the budget or schedule, so if you're the type of client that expects me to be here seven days a week, I'm not the right builder for you."

Barton's philosophy includes being an advocate

for skills training. He holds an honours certificate in general carpentry, Red Seal Interprovincial Certification, and has taught renovation technology at George Brown College in Toronto. "The one thing that separates the pros from the Joes is being properly trained. Catastrophic things happen when you put a reciprocating saw in unskilled hands. It doesn't take much to make a building collapse."

The first challenge with Bell's job was removing