

# PowerHouse brings green innovations to Lawrence

Constantine Valhouli

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LAWRENCE – If Thoreau were alive today, he might have moved to Lawrence instead of Walden Pond.

South Lawrence is becoming a center for environmental innovation. The Riverwalk features one of the largest solar roofs in the state. Monarch Lofts has the largest geothermal system in New England. Just down the road, an innovative PowerHouse home in the historic Loring Park neighborhood is becoming a showcase for green features and modular construction techniques.

“Green houses don’t necessarily look any different from other houses, but they have a very different relationship to the environment,” said Quincy Vale, CEO of PowerHouse Enterprises, which created the innovative home at 79 Market Street. PowerHouse received funding for the project from Robert Ansin of MassInnovation, a Lawrence-based sustainable development company.

The LEED-certifiable, factory-built home is the first of its kind in Lawrence. Besides the extensive environmental features, it uses reclaimed maple flooring from the nearby Duck Mill. “This is another good example of local sourcing and adaptive reuse,” said Vale.

The house at 79 Market Street is twin to a project in Cambridge, MA. PowerHouse’s other projects include a condominium complex in Portland, ME and one in Tenants Harbor, ME, and a single family home in Wellfleet, MA.

## What gave you the inspiration for PowerHouse?

QV: I ran the green buildings and schools program for Massachusetts. From 2000-2004, I had been a project manager for almost every green project that happened in the state. The projects involved architects, engineers, energy-efficiency and renewable energy specialists. I saw a need for a company like PowerHouse to act as a construction facilitator, to simplify the green construction process.

## Why modular construction?

QV: I grew up around apparel factories, so the idea of factory-built housing made intuitive sense. All the reasons to make every other thing in a factory apply to houses as well: a stable work force, the ability to buy raw materials in bulk, and quality control.

It is inherently greener to build in a factory. There are many things you can do in a factory that you can’t do as easily onsite. This means less waste and higher quality construction.

I am starting to believe that it is impossible to have a truly green house unless it’s made in a factory using modular construction.

## What defines a green building?

QV: The short answer: a green building is greater than the sum of its parts.

A true green building is the integration of the systems, components, and site. It’s about using materials that don’t deplete scarce resources and which don’t incorporate hazardous materials.

Above all, it’s how the house operates. The systems should be designed to work together and complement each other. For example, you can have natural systems and mechanical systems. Natural ventilation techniques using the positions of windows as well as mechanical ventilation. Passive solar heating as well as mechanical heating. Our PowerHouses generate their own electricity through solar panels on the roof.

A true green house is all these things, working together.

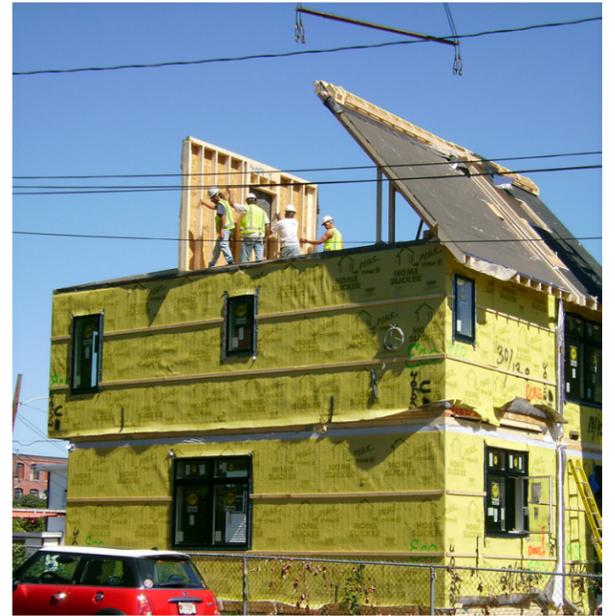
## Why are green building techniques so important right now? What is driving consumer interest in these projects?

QV: Oil, gas, and electricity prices are at or near record high prices. And they’re likely going to go much higher.

In the past, these sorts of prices were driven by a huge crisis – Hurricane Katrina knocking out pipelines, or the OPEC embargo in the 70s. Take the situation we’re in now, and then add in a serious supply disruption, another storm or earthquake, especially in the middle of winter when demand is high. Solar and geothermal energy reduce exposure to that sort of supply risk.

## People are spending more of their income on home costs and energy costs. How can living in an energy-efficient home help?

QV: Living in a PowerHouse home is a hedge against rising energy costs - you own your energy instead of renting it.



STAFF PHOTO: TOM DUGGAN

Modular construction in action: cranes lift the roof panels into place at 79 Market Street in Lawrence.

While others are paying their mortgage and renting their energy month-to-month, you’re paying your mortgage and building equity in the systems that generate electricity for you. You are your own power company. There is an inherent value to this.

## Do energy-efficient features make houses more valuable?

QV: Yes. Recent sales studies of energy-efficient houses show that they are worth more than comparable, conventional houses. Until recently, the real estate mantra has been “location, location, location.” In the future, it should be “performance, performance, performance.”



*Constantine Archimedes Valhouli is a principal of The Hammersmith Group, a firm which advises developers of luxury properties, and consults to cities on reviving historic downtowns. The firm and its projects have been featured in CNN/Money, Forbes, Fortune, NPR, Oprah, Urban Land, and the Wall Street Journal. Valhouli is a Charles G. Koch Fellow with the Institute for Humane Studies.*

## Lawrence's first eco-friendly house.

Designed by award-winning sustainable developer PowerHouse.

3 bedrooms, 2.5 baths, and 1468 s.f.

### Environmentally-friendly features include:

- Solar-assisted electrical and hot water systems
- Sustainably resourced materials
- Energy-efficient heating/cooling systems
- Low-VOC paints
- Eligible for Platinum LEED certification

In the historic Loring Park neighborhood. Walking distance to South Common, canals, and museums, as well as the shops and restaurants at Monarch.

For tours, please call 978 327 5990

Or visit us at [powerhouse-enterprises.com](http://powerhouse-enterprises.com)

Developed by: 79 Market St. LLC, Lawrence, MA  
 Financed through: MASS INNOVATION, Lawrence, MA  
 Design/Green Technologies: PowerHouse, Lawrence, MA  
 General Contractor/Homebuilder: NJZ Development, Hingham, MA; Epoch Homes, Pembroke, NH

