

Building complete communities

REALIZING SUSTAINABILITY



Kylemore Homes' Angus Glen neighbourhood in Markham has integrated sustainable measures into the design and building of a variety of housing types, including eco-friendly detached houses, townhomes and mid-rise condos. The community also has office space and a retail plaza, so there is a mix of buildings and amenities within the area.

PHOTO: KYLEMORE HOMES

Remarkable communities across the GTA showcase sustainable design and construction

Sustainability is a concept often talked about but seldom understood.

In the building industry, creating sustainable developments involves an integration of environmental, economic and social priorities. While not always easy to achieve, when done properly this integration can lead to better decisions and more complete communities.

The industry is meeting and in many cases exceeding Ontario's strict building code regulations, and communities are being built to a higher standard. In the GTA, there are many examples of residential and commercial developments that have received recognition and praise for sustainable builds from municipalities, partner agencies and leaders in sustainability.

"Builders are pushing their teams to do things differently than they have in the past," says Bryan Tuckey, President and CEO of the Building Industry and Land Development Association (BILD). "They're raising the bar on innovation and overall environmental performance and sustainability for new homes. And it's not only new homebuyers who are reaping the benefits of this, but all of us living in the GTA."

Why is sustainable construction a benefit to all of us? According to recent research by the Canada Green Building Council, buildings generate about 35 per cent of all greenhouse gases, 35 per cent of landfill waste comes from construction and demolition activities and 70 per cent of all municipal water is consumed in and around buildings.

MASTER PLANNING A SUSTAINABLE COMMUNITY

Patrick O'Hanlon and his team at Kylemore Homes are pioneers of sustainability in the GTA, and their Angus Glen community in Markham, strategically constructed over the past two decades, is an example of a development built to last.

Designed in partnership with fellow BILD member The Planning Partnership, Angus Glen was envisioned as a complete community from the get-go, explains O'Hanlon, Kylemore president and BILD past president.

Angus Glen is a new neighbourhood in Markham that has a variety of housing types including eco-friendly detached houses, townhomes and mid-rise condos all in one place. It also



TOP: Each suite in TAS Design Build's DUKE Condo development will include an energy recovery ventilator and each south-facing terrace will feature a planter, designed to encourage urban agriculture.

ABOVE: From left to right: Mazyar Mortazavi, CEO, TAS; Daniel Botelho, Partner, Brattys; Paul Johnston, Salesperson, Unique Urban Homes; Richard Witt, Principal, Quadrangle Architects

PHOTOS: TAS

has office space and a retail plaza, so there is a mix of buildings and amenities within the area.

There is a golf course, parks and "more trees than required." The builder also cleaned up the creek that runs through the site, which had been clogged with silt from farming use over the years.

"Now the creek is a flourishing, thriving natural feature," says O'Hanlon. "And we rehabilitated the whole thing through the development process."

For Kylemore's vision and leadership, the City of Markham presented the team with a

design excellence award in 2014, lauding Angus Glen as a "best in class example of a successful master planned community based on the principles of new urbanism." The project was also named the Places to Grow Community of the Year at the BILD Awards in 2013.

"When it comes to sustainability," says O'Hanlon, "we're constantly looking at what's next."

SUSTAINABILITY STARTS WITH DESIGN

TAS Design Build is another developer with a proven track record for green building and sus-

tainable initiatives that engage the community. President and CEO Mazyar Mortazavi says the importance of sustainability was instilled in him from an early age.

"It started when I was four and we kids were told to turn the tap off, turn the lights out and put as much food as we could eat on our plates."

BILD named TAS its Green Builder of the Year in 2014, in particular for the innovative approach the company took to designing and building DUKE Condos, an eight-storey community now under construction on Dundas St. West in the popular Junction neighbourhood.

Designed by another BILD member, Quadrangle Architects, every suite will have an innovative system that reduces energy demand and enhances air quality. There will also be harvest planters on all south-facing terraces and a green roof.

The key to sustainable development is to focus on it from the start of the design process, says Mortazavi, whose company has committed to building all its projects to a LEED Silver standard. TAS also has a green mandate, which dictates that projects like DUKE, have a 40/60 ratio of window to solid surfaces on the building's exterior, improving energy performance.

Mortazavi and his team see themselves as city-builders first; TAS designs and builds all of its developments paying attention to four pillars of sustainability: social, cultural, environmental and economical.

"We believe livable, high-quality cities have to have a sustainable character, and that's at the core of our commitment as a company and the work we do," Mortazavi says. "The buildings have to endure not just physically, but operationally as well."

"We need to be cognizant of future generations to come."

SUSTAINABILITY IN REVITALIZING A HERITAGE BUILDING

A restored 117-year-old brick warehouse at 60 Atlantic Avenue in Toronto's Liberty Village neighbourhood was recently recognized here at home and internationally for its creative urban design and sustainable features.

The project by BILD members Hullmark Developments and Quadrangle Architects received three awards from three different organizations, including a Toronto Urban Design Award, an award from the Association of Registered Interior Designers of Ontario and the prestigious UK magazine Architect's Journal Retrofit Award.

A critic's darling, 60 Atlantic is an adaptive-reuse project that's helped to transform Liberty Village into a vibrant mixed-use neighbourhood and hub for creative sector businesses. The site was excavated, exposing the basement to a new outdoor courtyard.

The building's original brick walls, heavy timber beams and high ceilings were reinstated and generous windows installed with a new heating, cooling and air-quality system. The redesign and redevelopment added a boldly modern steel and glass core in between two brick parts of the building, visually slicing the façade with an authentic update that pays homage to the industrial roots of the neighbourhood.

"Sixty Atlantic is about taking a building that has latent value," explains Richard Witt, a partner with Quadrangle Architects. "And it's about unlocking that value from an aesthetic point of view, from a spatial point of view, but also from an urban point of view."

All too often heritage projects focus solely on preservation, he points out. "But the reason a building is of value is because it continues to be useful. So heritage for us is not about preservation at all, it's about updating and re-engaging a building."

These three examples of sustainable design and construction add life, interest, environmental consideration and economic prosperity to their surrounding communities.

10 tips for home energy savings

GTA homes are being constructed to very high energy-efficiency standards.

One of the programs that provides incentives to developers for designing and building homes that achieve 25 per cent more energy efficiency than required by the 2012 Ontario Building Code is Enbridge's Savings by Design. The tactics used result in lower energy bills for homeowners by 25 per cent, putting more money in their pocket.

"It's great that builders are building homes that are so much more energy efficient than the current building code requires," says Shannon Bertuzzi, manager of residential energy solutions for Enbridge Gas Distribution. "But if the new owner isn't going to maintain it, then the point is lost."

Once the keys are handed over, new homeowners can take steps to ensure their homes perform the way they were intended – with efficiency and longevity.

Even in the most energy-efficient houses there are still things owners can do to reduce energy use and lower energy bills.



1 Seal it up

Fill cracks around windows with caulking or weather stripping to minimize heat loss.



2 Shower less

Reducing your session by a minute or two can make a big difference in energy consumption.



3 Upgrade

Install energy-efficient showerheads so you'll use less gas to heat your water.



4 Fix leaks

One drop of hot water per second for a month adds up to 16 steamy baths, Enbridge notes.



5 Close the damper

Keep the damper on your wood fireplace closed when it's not in use; this helps control heat loss. Or get a gas one.



6 Wash cold

You don't need hot water to clean laundry; and energy savings from using cold water can be significant.



7 Run a full dishwasher

Use the energy saver cycle if it has one.



8 Heat less

Set your thermostat at 20°C (68°F) by day and 17°C (62.6°F) at night. Use a programmable thermostat to do it for you.



9 Replace furnace filters

Do it every three months, and keep vents and air returns free of obstructions. If it's a clunker, replace your entire furnace.



10 Power down

Install energy-saving light bulbs, unplug electronic devices you're not using, especially when you go on vacation.