

April 13, 2016

Tour of super energy efficient rental building: King Edward Villa

Wednesday, April 13, 10 a.m. — 1568 East King Edward Avenue, Vancouver

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Context

The government of B.C. is expected to release a new Climate Leadership Plan later this spring. This plan will likely include carbon reduction and energy efficiency targets for the building sector.

In the meantime, leaders in the building industry are already building the super energy efficient buildings of tomorrow. A week before Earth Day (April 22), this tour will provide the opportunity to visit a Passive House-inspired multi-unit residential building during its construction, allowing a unique “behind the wall” view of the secret to building durable, low-cost, healthy and highly efficient buildings.

The builder, energy consultant, local window manufacturer, City of Vancouver staff and experts from the Pembina Institute will be available to comment on the project and how it relates to the province’s climate plan and the City of Vancouver’s proposed Zero-Emission New Building Strategy.

Interview opportunities on site

- Tom-Pierre Frappé-Sénéclauze, Senior Advisor, and Karen Tam Wu, Director of Buildings and Urban Solutions, Pembina Institute
tompierre@pembina.org / 604.874.8558 x227
- Paul Warwick, Senior Project Manager, Performance Construction (builder)
paul@perfcon.ca / t: 604.628.9616 / c: 604.721.6034
- Helen Lui, Sustainability Project Manager, E3 Eco Group (green building consultant)
helen@e3ecogroup.com / t: 604.874.3715 / c: 778.238.7826
- George Nickel, Innotech Windows, Abbotsford (window manufacturer)
t: 604.854.1111
- Chris Higgins, Green Building Planner, City of Vancouver
Chris.Higgins@vancouver.ca / t: 604.871.6288

About the building

- King Edward Villa is a six-storey market rental residential building at the corner of East King Edward Avenue and Kingsway (1568 East King Edward Avenue). Construction is expected to be completed in summer 2016.
- The design is inspired by Passive House principles, and is targeting the highest Leadership in Energy and Environmental Design certification available (LEED Platinum).
- This building is part of the City of Vancouver’s Rental 100 program, which provides zoning incentives to encourage new rental housing development.
- The project achieves high energy efficiency at modest cost by focusing on improving insulation and air-tightness of the building. This is simple, durable technology.
- Mechanical ventilation with heat recovery ensures each unit has high indoor air quality.
- The high performance windows were assembled locally, in Abbotsford, by Innotech.
- Estimated annual heating cost for a studio unit: \$60 per year.

Energy efficiency in buildings

- Buildings are responsible for 11% of B.C.'s total greenhouse gas emissions.
- B.C.'s [Climate Leadership Team](#) recommended [halving emissions from buildings by 2030](#). The team further recommended that all public buildings be built to [nearly net-zero energy standards](#) starting in 2016 and private-sector buildings meet this standard by 2030.
- Ensuring new buildings are super energy efficient will prevent “locking in” carbon pollution from future buildings. Nearly three-quarters of the building space available in 2050 has yet to be built.
- In B.C., the green building sector already supports [more than 23,000 jobs](#). Many components of high efficiency buildings, such as insulation, windows and wood products, are produced in B.C.
- A [coalition](#) of over 100 developers, local governments, architects, engineers, universities, professional associations and nonprofits in B.C. has called on the province to define a roadmap towards super energy efficient buildings and provided recommendations for this path.

City of Vancouver's Zero-Emission New Building Strategy

If approved by city council, the ZEN building plan would:

- Aim to reduce emissions in new buildings and respond to council's direction to pursue passive and envelope focused approaches.
- Target the majority of new buildings constructed in Vancouver to be zero emissions by 2025, and spur the creation of a suite of policies, including incentives and regulations, to be implemented between 2017 and 2025 to meet that goal.
- Build off recently adopted policy updates to provide greater flexibility to permit Passive Houses in Vancouver. Passive House is currently an option for rezoned projects, and a number of Passive House projects are under construction in Vancouver.

Further information

- Call for Action on Climate and Energy in the Building Sector
<http://www.pembina.org/pub/buildings-declaration>
- Blog: Super energy-efficient buildings have key role to play in climate action
<http://www.pembina.org/b-2866>
- B.C. Climate Leadership Team recommendations
<http://www.pembina.org/p-2789>
- Digital renderings and photos of the site are available upon request.