

RBC, Mattamy, EllisDon pact looks to boost demand for low-carbon materials

Responsible Buildings Pact will focus on concrete as its first material to pilot



Tyler Choi Business editor



The Climate Smart Buildings Alliance (CSBA), led by Royal Bank of Canada, Mattamy Homes and EllisDon, has unveiled an initiative that will have its members pilot the adoption of low-carbon building materials, starting with concrete.

The <u>Responsible Buildings Pact</u> was announced at the <u>Canada Green Building Council</u>'s Building Lasting Change conference in Toronto on Wednesday. Participants include developers Mattamy, Daniels and Northcrest Developments; consultants Dialogue and <u>RJC Engineers</u>; and contractors EllisDon and Aecon.

Currently made up of 23 developers, consultants, contractors and supporters, the voluntary group will share best practices and learn from the experience.

"How do we get more conversations happening up and down that value chain? How do we get to a place where everyone thinks it's their job on a particular project, because building's a team sport, so we need to get to a place where shared accountability across all the actors in that project towards reducing the embodied footprint of that building," David Messer, director of CSBA, told Sustainable Biz Canada in an interview at the event.

Residential developer Mattamy hopes the pact will stimulate demand for sustainable materials, shifting from a premium product to a mainstream offering, Phillip Santana, Mattamy's director of sustainability, said in an interview.

The CSBA, founded in 2023, is an industry organization aiming to push the building industry to net-zero by assembling companies from the development, contracting and financing sectors. CSBA is also addressing electrification, and net-zero buildings and retrofits.

Goals of the Responsible Buildings Pact

Embodied carbon, which originates from a building's materials, is a major source of climatewarming pollution. Lower-carbon alternatives to materials such as cement and steel are being explored by companies to reduce their climate impact.

The pact's goal is to increase the adoption of low-carbon materials in the built environment.

Concrete was chosen because it is a "high-impact carbon material," Messer said. Plus, there has been significant progress on the amount of mix options to reduce carbon emissions.

Participating developers and contractors will consider a Low Carbon Material Consideration (LCMC) process, while consultants will examine a Low Carbon Design Consideration (LCDC) process. Both will be used on live projects. Affordability, availability and performance will be important factors.

Members will use or advocate for low-carbon materials or strategies on a minimum of five projects, and the results will be shared with other members.

The pilots will run from June 5 to approximately April 30, 2025.

Supporting openness and sharing

Transparency will be emphasized in the pact. The choice of materials will be reported publicly, as will the challenges companies are facing, how obstacles can be overcome and best practices.

Participants will be encouraged to defend why a material was used and be open about the challenges faced in using the sustainable alternative.

A hypothetical company could ask itself, "I tried it on 10 projects. On eight of them, I got alternative bids to assess and on two or three or hopefully more, we were then able to select a lower-carbon version of that material. And maybe on the ones that they didn't select, what was the deciding factor? Was it purely the cost? Was it time and schedule? Was it availability?" Santana said.

The outcomes of the LCMC and LCDC processes will be tracked and reported with members of the pact.

Pushing the market to sustainability

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The pact's members hope to encourage the market to build up the momentum for sustainable materials.

Santana said the pact can stimulate the supply side to manufacture more low-carbon materials by giving concrete producers a sense of the potential demand.

"If we have more and more individuals in the pact . . . the more we're talking about this and the more we're asking for it, we're hoping it will start to shift momentum towards more availability of these products and ultimately more accessibility for the broader industry," he said.

Greater use of sustainable building materials means creating new markets, thus lowering costs, Messer said.

After the pilots

A report summarizing the pilots from each company will be released in the spring of 2025, Messer said. Members will have the opportunity to review and approve the parts of the report relevant to their company, and have the option to withdraw.

After the pilots, a formal pact agreement will be crafted, with each company pledging to applying the lessons to every project.

After the concrete pilots are finished, Messer said the pact will move on to other materials such as steel, cladding, insulation and finishes. Making the pact adaptable and sensible for business is important, so it will not be looking to impose heavy compliance burdens that may turn off interested parties.

Messer's target is to grow the pact's signatories to over 100 members in a year. CSBA will be partnering with organizations such as BILD GTA to increase its ranks.

Other action plans for 2024 are: working with governments to support smart building codes; a mass timber and biomaterials solutions lab; and a lab for net-zero buildings and retrofit finance solutions.

Editor's note: Messer's target was previously stated to be growing CSBA's membership. It has been clarified it is the pact's signatories.