

Item 10.3.1



August 23rd, 2019

Simon Ross-Siegel
Legislative Assistant, Office of the Municipal Clerk
1841 Argyle Street, PO Box 1749
Halifax, NS B3J 3A5

Dear Mr. Ross-Siegel,

RE: Request to Deliver a Presentation to the Halifax Regional Municipality's Environment and Sustainability Standing Committee

We request the opportunity to present to the Halifax Regional Municipality's Environment and Sustainability Standing Committee (ESSC) at the next available meeting. If our request is accepted, Diane Praught will address the Committee on behalf of CarbonCure Technologies Inc. This request follows a site tour of CarbonCure's new and expanded Dartmouth R&D centre held on July 31st, 2019 and a subsequent invitation by Councillors Lisa Blackburn and Shawn Cleary to present to the ESSC.

About CarbonCure Technologies

Dartmouth-based CarbonCure is a clean technology firm employing 35 full-time staff. It has been recognized as one of the top 100 global cleantech companies for each of the past 4 years and is a 2019 Bloomberg New Energy Pioneer and a Carbon XPRIZE finalist. Its original Nova Scotian shareholders, including Innovacorp, the Shaw Group, and local angel investors, have been joined by global business leaders including Bill Gates and Michael Bloomberg.

CarbonCure is the world leader in the estimated \$1 trillion CO₂ utilization technology industry that has the potential to reduce 7 billion tonnes of CO₂ annually. Generally, CO₂ utilization technologies permanently convert carbon dioxide (a greenhouse gas) into value-added products including concrete, plastics, chemicals, and fuel. CarbonCure locally manufactures its technology for global concrete producers to consume carbon dioxide (CO₂) in fresh concrete during production. This CO₂ is converted into a mineral and becomes permanently captured within the concrete. This reaction enables concrete producers to reduce



their use of cement, further reducing life-cycle emissions required to create concrete products.

CarbonCure's technology has been installed in more than 150 concrete plants across North America and Southeast Asia. Locally, Quality Concrete, based in Dartmouth, and Shaw Brick, based in Lantz, have used CarbonCure successfully for commercial and residential projects since 2013. CarbonCure can be installed in any concrete plant and is not exclusive to specific producers.

Relevance to Halifax Regional Municipality

Concrete is the most abundant man-made material in the world and is the foundation of modern civilization. Cement is the critical ingredient that gives concrete its strength, however, it is responsible for up to 7% of the world's annual CO₂ emissions. Concrete is also the largest single contributor to the embodied CO₂ emissions of buildings. As the primary stewards of Canada's infrastructure; municipalities are significant consumers of concrete. Consequently, local governments have significant ability to create market signals to 'green' the concrete manufacturing sector to achieve emissions reductions.

HRM has demonstrated leadership in reducing carbon emissions, having committed to carbon neutrality before the year 2050 and the declaration of a climate emergency during a Council vote held on January 29th, 2019. Achieving the goal of carbon neutrality will require action across all sectors. The use of CO₂ mineralized concrete offers immediate opportunity to reduce the carbon footprint of concrete purchased and used by HRM.

Presentation Outline

CarbonCure proposes to deliver an informational presentation to the ESSC that will provide a general overview of the technology, the status of market adoption, examples of other municipal government action and the value proposition for HRM. We will request that the members of the ESSC consider taking forward a motion to the Regional Council that would:

- Direct staff to evaluate and report on current specifications used to procure concrete to ensure that language used does not inadvertently exclude the



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use of CO₂ mineralized concrete and to assess the feasibility of the use of mineralized concrete for HRM projects;

- Set a procurement preference for the use of CO₂ mineralized concrete in HRM projects provided that the utilization of CO₂ mineralized concrete does not significantly increase costs, affect quality, or create significant delays.

We appreciate your consideration of this request.

Sincerely,

ORIGINAL SIGNED

Diane Praught
Director of Technical Services
CarbonCure Technologies Inc.

ORIGINAL SIGNED

Robert Niven
CEO and Founder
CarbonCure Technologies Inc.