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**CLIMATE CHANGE AND
EMISSIONS MANAGEMENT
(CCEMC) CORPORATION**

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CLIMATE CHANGE AND EMISSIONS MANAGEMENT CORPORATION (CCEMC) INVITES SUBMISSIONS FOR SECOND ROUND OF \$35 MILLION INTERNATIONAL CARBON USE COMPETITION

EDMONTON, ALBERTA - The Alberta-based Climate Change and Emissions Management Corporation (CCEMC) is inviting submissions for the second round of the \$35 million international CCEMC Grand Challenge: Innovative Carbon Uses. The competition seeks out technologies from around the world that can turn captured carbon dioxide emissions into useful products while reducing greenhouse gas emissions.

"CCEMC is looking for projects that take carbon dioxide emissions and use them to economically produce useful products right here in Alberta," said CCEMC Managing Director, Kirk Andries. "If captured carbon is repurposed and becomes an enabling starting material, instead of a waste stream, we are confident it will attract new businesses and create new markets."

In the second round of the international competition, new entrants will join 24 round one winners. The focus becomes narrower and the stakes higher. CCEMC is placing emphasis on projects that can be commercialized in Alberta by 2020, and reduce GHG emissions by one megatonne annually. Submissions are due January 18, 2016.

CCEMC will name five second round winners in 2017. Each will receive CDN \$3 million and have two years to refine their technology. At the end of the competition in 2019, one project will receive CDN \$10 million to help them commercialize their technology in Alberta.

Technical teams will review all submissions. Final decisions are made by the CCEMC Board with input from an advisory panel comprised of leaders from across Canada and around the world.

Round one winners seeing success

The CCEMC Grand Challenge launched in 2013 and the first round drew 344 submissions from 37 countries. CCEMC selected 24 projects that each received CDN \$500,000 to advance their ideas.

"We have been honored to win funding and recognition from the CCEMC and are thrilled to participate in the Grand Challenge," said Solidia Technologies CEO Tom Schuler. "This prestigious endorsement provides important momentum to the commercialization of our technology that can reduce the CO₂ emissions of cement and concrete production around the world by up to 70% and inspire other innovators to find commercial applications for carbon."

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Winners from the first round of the CCEMC Grand Challenge have seen growing interest in their technology and increasingly demonstrate these technologies can be economically feasible. For example:

- Solidia Technologies uses carbon dioxide instead of water to cure cement. Their technology reduces GHG emissions up to 70 per cent. LafargeHolcim signed a partnership agreement with Solidia in April 2015 to commercialize the technology for pre-cast concrete manufacturing.
- In July 2015, Liquid Light secured a deal with Coca-Cola Company to further develop their technology that makes chemicals from carbon dioxide, including mono-ethylene glycol. Mono-ethylene glycol is a component in Coca-Cola's recyclable PET plant bottles.
- Skyonic Corporation opened the world's first commercial scale carbon capture and utilization facility in Austin Texas in 2014. Skyonic builds and retrofits plants that produce carbon negative chemical products while mineralizing industrial CO₂ emissions. Their technologies economically extract and mineralize carbon dioxide from industrial flue gas into products such as baking soda, hydrochloric acid and limestone at a commercial scale.

There are already markets in Alberta for products like pre-cast concrete, baking soda, hydrochloric acid and limestone.

CCEMC focuses on stimulating transformative change by funding projects that reduce greenhouse gas emissions and help Alberta adapt to climate change. Funding for CCEMC is sourced from Alberta's large industrial emitters. In Alberta, large emitters have a mandatory legislated requirement to achieve specified reductions of greenhouse gases. If they're unable to reach their target one option is to pay a levy into the Climate Change and Emissions Management Fund. The Government of Alberta administers the fund and CCEMC receives grants from the fund to support its work.

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Note to editors:

Background on each of the Round 1 projects is available here:

<http://ccemc.ca/projects/carbon-use/>

Video on the round one projects is available here:

<https://www.youtube.com/watch?v=fRRXcTH8vcl>

CONTACT INFORMATION

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