

# CO<sub>2</sub> Solutions to Complete Testing of Contactor Equipment at EERC

*Project to validate roadmap to low carbon capture process CAPEX*

QUEBEC CITY, Sept. 14, 2016 /PRNewswire/ - CO<sub>2</sub> Solutions Inc. ("CO<sub>2</sub> Solutions" or the "Corporation") (TSX-V: CST), the leader in the field of enzyme-enabled carbon capture technology, today announced the schedule of its pilot testing of Rotating Packed Bed (RPB) equipment at the University of North Dakota Energy and Environmental Research Center (EERC). In CO<sub>2</sub>Solutions' opinion, based on bench-scale work to date, the RPB has shown strong potential to further reduce the size and capital cost of an enzyme-accelerated carbon capture process.

The tests, planned from September 12<sup>th</sup> through September 26<sup>th</sup>, with a provision for a longer test period, if required, are expected to further validate the performance of the RPB at EERC's facility using natural gas and coal flue gas. The objective of these tests is to confirm earlier bench-scale test findings that indicated the potential of replacing significantly larger (20 to 50 times) conventional packed tower contactors for CO<sub>2</sub> capture with RPB equipment.

"The outcome, if our earlier results are confirmed, is that implementation of our technology will be even lower cost than what we have demonstrated thus far," stated Evan Price, President and CEO of CO<sub>2</sub> Solutions. "The logical follow up will be to insert RPB equipment into commercial scale projects for the capture, utilization and/or sequestration of carbon from large industrial emitters. At large scale, we anticipate achieving capture costs below those associated with emitting carbon, creating a strong economic incentive for the adoption of our technology. We believe we have the technology that will aid industry in meeting the ambitious GHG emission reduction targets, introduced following COP21, in a way that is viable and that will allow industry to remain competitive."

The earlier tests of the RPB equipment using the Corporation's proprietary enzyme-based solvent, carried out at bench-scale, demonstrated CO<sub>2</sub> absorption rates at least 5 times higher than conventional amine solvent processes. Furthermore, the Corporation's technology may be considered environmentally benign, as opposed to amine systems which produce toxic waste streams. Being significantly smaller than conventional packed towers, the RPB requires very fast reaction kinetics between the CO<sub>2</sub> and the solvent, which to date has only been possible using CO<sub>2</sub> Solutions' proprietary enzyme-enabled solvent.

The upcoming tests at EERC will measure the capture efficiency of the RPB at approximately 10 times the capacity of the largest tests conducted to date with this type of equipment. Third party verification of test data is expected to provide the required validation of the RPB in a carbon capture setting, as well as provide data for scale up to commercial applications. The cost advantages of the RPB relate mainly to its small size,

leading to reduced CAPEX. An additional advantage of the RPB is the reduced footprint, which provides the ability to address industries where space is at a premium.

As noted in the Corporation's April 7, 2016 press release, this testing is supported financially in part by a grant extension from Natural Resources Canada's ecoENERGY Innovation Initiative program in the amount of \$605,000.

### *Drawdown under Loan Agreement and Issuance of Warrants*

The Corporation has received an additional advance of \$300,000 under the terms of the previously disclosed loan agreement entered into as of August 31, 2016. In connection with this final drawdown, CO<sub>2</sub> Solutions issued an aggregate of 1,764,706 non-transferable common share purchase warrants (the "Warrants") to the lenders, each Warrant entitling its holder to acquire one common share of CO<sub>2</sub> Solutions (a "Common Share") at a price of \$0.17 per Common Share until August 31, 2018, subject to early expiry if the loan is repaid before August 31, 2017. The Warrants and underlying Common Shares are subject to a four-month hold period until January 13, 2017.

### **About CO<sub>2</sub> Solutions Inc.**

CO<sub>2</sub> Solutions is an innovator in the field of enzyme-enabled carbon capture and has been actively working to develop and commercialize the technology for stationary sources of carbon pollution. CO<sub>2</sub> Solutions' technology lowers the cost barrier to Carbon Capture, Sequestration and Utilization (CCSU), positioning it as a viable CO<sub>2</sub> mitigation tool, as well as enabling industry to derive profitable new products from these emissions. CO<sub>2</sub> Solutions has built an extensive patent portfolio covering the use of carbonic anhydrase, or analogues thereof, for the efficient post-combustion capture of carbon dioxide with low-energy aqueous solvents. Further information can be found at [www.co2solutions.com](http://www.co2solutions.com).

### **CO<sub>2</sub> Solutions Forward-looking Statements**

Certain statements in this news release may be forward-looking. These statements relate to future events or CO<sub>2</sub> Solutions' future economic performance and reflect the current assumptions and expectations of management. Forward-looking statements in this news release include, but are not limited to, the pilot testing RPB equipment, its potential, commercial use and advantages. Factors that could cause actual results to differ materially from such forward-looking statements include, but are not limited to, results of testing, general business and economic uncertainties and adverse market conditions as well as those risks set out in the Corporation's public documents filed on SEDAR. Readers are cautioned not to place undue reliance on such forward-looking statements. Certain unknown factors may affect the events, economic performance and results of operations described herein. CO<sub>2</sub> Solutions undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable law.

***Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.***

SOURCE CO2 Solutions Inc.