

Aduro Clean Technologies is expanding scope of pilot plant engineering by Exergy Solutions to include chemical recycling of polyethylene

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Sarnia, ON, October 21, 2021 – **Aduro Clean Technologies Inc.** (CSE: ACT) (OTCQB: ACTHF) (FSE: 9D50) (the “Company,” “Aduro Clean Technologies”) a developer of patented water-based technologies to chemically recycle plastics and transform heavy crude and renewable oils into new-era resources and higher-value fuels, is directing Exergy Solutions (“Exergy”) to extend its process design and engineering work on Hydrochemolytic™ Bitumen Upgrading (HBU) to polyethylene upcycling.

As the Company advances toward its Hydrochemolytic™ Bitumen Upgrading (HBU) milestone, work with Exergy to design and engineer the “R3” pilot-scale HBU reactor revealed commonalities for the application of Hydrochemolytic™ Plastic Upcycling (HPU) to polyethylene (PE).

According to Matt McCulloch, Exergy VP of Clean Technology and Innovation, “Aduro Clean Technologies has a firm grip on the core Hydrochemolytic technology (HCT), which is very similar between the bitumen upgrading and PE upcycling applications. We therefore can move to process design and engineering very efficiently, beginning with the 10-tonne-per-day R3-scale pilot reactor for HBU and continuing with R3 for PE, which are the stepping-stones to even larger pre-commercial ‘R4’ plants and beyond.”

The ability to extend the HBU process engineering efforts directly to the PE application offers important efficiency gains for Exergy work and Aduro commercialization efforts. According to Ofer Vicus, CEO of Aduro Clean Technologies, “We established the underlying science of Hydrochemolytic technology (HCT) several years ago, so the critical path to commercialization does not depend on research and discovery, but on the well-established

chemical engineering practices. We're very pleased to have the benefit of Exergy engineering expertise needed to take our scientifically-grounded HCT and scale it up."

Vicus explained further that "Achieving the First Milestone really is more of a formality that simply shows the same chemistry we've done a hundred times in small laboratory batch reactors also works in the regime of continuous-flow commercial systems. The nice thing is, our experience tells us it always works better, giving us great confidence as we move to R3-scale projects to process both bitumen and PE."

About Exergy Solutions

Exergy Solutions Inc. (Exergy) is a leading supplier of engineering solutions and services that enable industry transition to a low carbon future. Exergy accelerates its clients' development and deployment of clean-energy process technology through unique integration of rapid prototyping, field-scale piloting, digital solutions, and advanced manufacturing. Based in Calgary, Alberta, Exergy has a state-of-the-art additive manufacturing facility in the University of Calgary Life Science Innovation Hub with industrial 3D printers, post-processing solutions, and a wireless augmented & virtual reality studio. For more information, visit exergysolutions.com or follow @exergysolution on Twitter.

About Aduro Clean Technologies

Aduro Clean Technologies is a developer of patented water-based technologies to chemically recycle waste plastics; convert heavy crude and bitumen into lighter, more valuable oil; and transform renewable oils into higher-value fuels or renewable chemicals. The Company's Hydrochemolytic™ technology activates unique properties of water in a chemistry platform that operates at relatively low temperatures and cost – a game-changing approach that converts low-value feedstocks into 21st-century resources. With funding and support from Bioindustrial Innovation Canada, the Company has developed a pre-pilot reactor system to upgrade heavy petroleum into lighter oil. Additional information on Aduro Clean Technologies is available on the Company's [website](#).

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Forward-Looking Statements

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The CSE has not reviewed, approved, or disapproved the content of this news release.