

Aduro Clean Technologies Files New Patent Application on Novel Process Design

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The new patent application covers a multi-functional process that integrates several off-the-shelf devices, including (an) extruder(s), for effective implementation and scaleup of Aduro Hydrochemolytic™ Technology LONDON, Ontario, Jan. 30, 2025 (GLOBE NEWSWIRE) -- **Aduro Clean Technologies Inc.** ("Aduro" or the "Company") (Nasdaq: ADUR) (CSE: ACT) (FSE: 9D5), a clean technology company using the power of chemistry to transform lower value feedstocks, like waste plastics, heavy bitumen, and renewable oils, into resources for the 21st century, today announced that it has filed a patent application in the United States for a novel process design for effective implementation of its Hydrochemolytic™ Technology ("HCT"). The design will be integrated into the Next Generation Process ("NGP") Pilot Plant, which remains on schedule for completion in the third quarter of this year.

This new patent application strengthens Aduro's position in advancing HCT chemistry and its practical implementation, allowing the Company to continue advancing its commercial path by building on its expanded intellectual property assets. The application also marks the achievement of a key milestone the Company set as part of its main objectives for the current year.

A key innovation of the NGP design is that it uses widely available industrial equipment in a novel fashion not previously envisioned by other approaches, enabling a more efficient and scalable implementation of Hydrochemolytic™ Technology. Over the past two years, the Company has engaged key international vendors in Europe and the United States to test, evaluate, and refine critical elements of the design. The patent application represents the culmination of years of research aimed at developing and optimizing an effective modular process to deconstruct polyaddition polymers such as polyethylene (PE), polypropylene (PP), polystyrene (PS), and others, whether contaminated or non-contaminated feedstock. By rethinking conventional processing methods, Aduro has developed a practical and scalable solution to overcome longstanding challenges in chemical recycling.

"The submission of this patent strengthens Aduro's ability to advance both the chemistry and practical application of Hydrochemolytic™ Technology," said Ofer Vicus, CEO of Aduro. "It highlights the ingenuity of our scientists and their commitment to driving innovation that enhances the company's value. This process introduces a novel approach to integrating HCT with widely available industrial equipment, expanding our technological capabilities.

This achievement also reinforces our focus on developing scalable, modular solutions that align with our commercialization strategy and industry needs.”

The Company continues to focus on building and commissioning the NGP Pilot Plant and expanding its engagement with potential customers. The filing of this new patent application enables Aduro to progress with ongoing discussions with existing and new participants in the Company’s Customer Engagement Program (CEP) and to share more details on key aspects of the technology’s process design and performance. The patent application adds substantive perspective on the Company’s direction and plans towards commercialisation.

“Our objective was to optimize the application of Hydrochemolytic™ Technology without the need for custom-built processing equipment,” said Marcus Trygstad, Principal Scientist, and co-inventor. “By working from core chemical principles, we identified a way to realize the full benefit of HCT while using widely available industrial equipment in a novel configuration. This achievement reflects the dedication and ingenuity of our research team, whose work continues to drive innovation in process design and scalability.”

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 relies on water as a critical agent in a chemistry platform that operates at relatively low temperatures and cost, a game-changing approach that converts low-value feedstocks into resources for the 21st century.

For further information, please contact:

Abe Dyck, Head of Corporate Development / Investor Relations

ir@adurocleantech.com

+1 226 784 8889

KCSA Strategic Communications

Jack Perkins, Vice President

aduro@kcsa.com

Forward-Looking Statements

This news release contains forward-looking statements. All statements, other than statements of historical fact that address activities, events, or developments that the Company believes, expects, or anticipates will or may occur in the future, are forward-looking statements. The forward-looking statements reflect management’s current expectations based on information currently available and are subject to a number of risks and uncertainties that may cause outcomes to differ materially from those discussed in the forward-looking statements. The forward-looking statements in this release include, but are not limited to, that the new patent design will be implemented and demonstrated in the NGP Pilot Plant, which is currently on track for completion in the third quarter of this year;

that the new patent application positions Aduro not just as a leader in HCT chemistry but also in its effective implementation, allowing the Company to continue advancing its commercial path by building on its expanded intellectual property assets; that the application also marks the achievement of a key milestone that the Company set as part of its main objectives for 2025; that the Company continues to focus on building and commissioning the NGP Pilot Plant and expanding its engagement with potential customers; that the filing of this new patent application will enable Aduro to progress with ongoing discussions with existing and new participants in its Customer Engagement Program and to share more details on key aspects of the technology's process design and performance; that the patent application adds substantive perspective on the Company's direction and plans towards commercialization; and that this achievement reflects the dedication and ingenuity of Aduro's research team, whose work continues to drive innovation in process design and scalability. Although the Company believes that the assumptions inherent in the forward-looking statements are reasonable, forward-looking statements are not guarantees of future performance, and, accordingly, undue reliance should not be put on such statements due to their inherent uncertainty. Important factors that could cause actual results to differ materially from the Company's expectations include, but are not limited to, delays in the supply chain or unforeseen technical challenges could prevent the NGP Pilot Plant from being completed on schedule or at all; that competitors may develop similar technologies or patent disputes could arise, hindering Aduro's ability to establish and maintain its leadership position and advance its technology to commercialization; failure to secure necessary regulatory approvals or unexpected technical difficulties could prevent the achievement of the key milestone related to the patent filing; market conditions or lack of customer interest could impede the Company's efforts to build and commission the NGP Pilot Plant and expand customer engagement; inadequate patent protection or failure to demonstrate the technology's effectiveness could hinder progress in discussions with the participants of the Customer Engagement Program; changes in market demand or regulatory hurdles could negatively impact the Company's direction and plans towards commercialization; and loss of key personnel or insufficient funding could impede the research team's ability to drive innovation in process design and scalability; and the risk of adverse market conditions and other factors beyond the control of the parties. The Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether because of new information, future events, or otherwise, except as required by applicable law.



The **Between** Chemistry.

NASDAQ: ADUR • CSE: ACT • FSE: 9D5



A photo accompanying this announcement is available at

<https://www.globenewswire.com/NewsRoom/AttachmentNg/a2c5a250-6eb4-4849-a2db-c3fb53ff4714>

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