



HYDROCARBON PROCESSING*

IRPC

October 2-3, 2024 | DoubleTree by Hilton, Greenway Plaza, Houston, TX

Hydrochemolytic Technology: A Cost-Effective Alternative to Pyrolysis for The Chemical Recycling of Mixed Plastic Waste



Eric Appelman
Chief Revenue Officer



Abe Dyck
Corporate Development





Eric Appelman
Chief Revenue Officer
eappelman@adurocleantech.com

Hydrochemolytic™ Technology

A cost-effective alternative to pyrolysis
for the chemical recycling of mixed
plastic waste

Forward looking statements

DISCLAIMER This presentation (the "**Presentation**") of Aduro Clean Technologies Inc. ("**Aduro**", "**we**", "**our**", "**us**" or the "**Corporation**") and the material contained herein is for information purposes of the recipient only and shall not constitute an offer to sell, or a solicitation or an offer to buy, any securities of the Corporation. There are substantial risks associated with investing in development stage clean energy technology companies. Potential investors should seek advice from a qualified financial dealer prior to considering any investment in Aduro. No securities commission or similar authority has in any way passed on any of the information contained in this Presentation. The information contained herein is subject to change without notice and is based on publicly available information, internally developed data and other sources.

FORWARD-LOOKING STATEMENTS Where any opinion or belief is expressed in this Presentation, it is based on the assumptions and limitations mentioned herein and is an expression of present opinion or belief only. This Presentation should not be construed as legal, financial or tax advice to any individual, as each individual's circumstances are different. The recipient of this Presentation should consult with its own professional advisors regarding its particular circumstances. Unless defined herein, all capitalized words shall have the meanings ascribed to them elsewhere in the Presentation.

This Presentation contains certain forward-looking statements and forward-looking information (collectively referred to herein as "**forward-looking statements**") within the meaning of applicable securities laws. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as "anticipate", "achieve", "could", "believe", "plan", "intend", "objective", "continuous", "ongoing", "estimate", "outlook", "expect", "may", "will", "project", "should" or similar words, including negatives thereof, suggesting future outcomes. Forward-looking statements in this Presentation may include, among other things, statements about: our business plans and strategies, including the aim of unlocking significant environmental and economic benefit, the Corporation's 2024 strategic goals and three transformational business goals to achieve commercialization; the Corporation's goal relating to the NGP, including the goal of completion of the pilot design, built with industrial components to take real world feedstocks and produce product with specification defined by our customers; the Corporation's goal relating to CEP, including the goal to convert two clients from Technology Evaluation to Technology Collaboration and continue the journey with first adopters to establish a commercial program; Aduro's revenue opportunities at every stage, including simple, clean streams, multi-layered, clean streams and complex dirty waste streams and the associated timeline between 2023 and 2027; the plans for expanding on the Corporation's IP position by conducting ongoing research and filing additional patents and the goal to file a minimum of 2 additional patents; the Corporation's commercialization program and related plans; the expected opportunities for Aduro's potential market share penetration; our plans for potential future products and services; our potential future intellectual property; expectations regarding key areas of growth in the industries we plan to serve; and our future growth strategy. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which the Corporation currently operates and expects to operate in the future, including: the potential demand for our products and services; our ability to deliver our technology in a scalable manner; our ability to develop technological improvements; anticipated costs and our ability to achieve our proposed goals; our ability to attract and retain experienced personnel and executive leadership; our ability to anticipate the needs of our future customers; sales opportunities available to us; that historical market trends will continue in the future; the creditworthiness of our contract counterparties; that our products and services will be competitive; our ability to obtain all

necessary intellectual property protections for our products and services; and our ability to access future capital investment, as required. Although we believe that the assumptions underlying these statements are reasonable, they may prove to be inaccurate or otherwise incorrect. Given these risks, uncertainties and assumptions, you should not place undue reliance on these forward-looking statements.

Forward-looking statements in this Presentation are subject to known and unknown risks, uncertainties and other important factors that may cause the actual results to be materially different from those expressed or implied by such forward-looking statements, including but not limited to: our ability to manage our operating expenses, which may adversely affect our financial condition; our ability to remain competitive as other better financed competitors develop and release competitive products; changes in laws and regulations; legal and regulatory uncertainties; our dependence on our intellectual property rights; our ability to successfully maintain and enforce our intellectual property rights and defend third-party claims of infringement of their intellectual property rights; the impact of intellectual property litigation that could materially and adversely affect our business; our failure to deliver our technology in a scalable fashion; our failure to develop new and innovative products and services; our reliance on novel technologies and processes; the impact of technological changes on our products and industry; our failure to develop technological upgrades and new technologies; our ability to attract, retain and motivate qualified personnel and key employees; failure of counter-parties to perform their contractual obligations; and business, economic and market conditions; demand and pricing for our products.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future event or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. Neither we nor any of our representatives make any representation or warranty, express or implied, as to the accuracy, sufficiency or completeness of the information in this Presentation. Neither we nor any of our representatives shall have any liability whatsoever, under contract, tort, trust or otherwise, to you or any person resulting from the use of the information in this Presentation by you or any of your representatives or for omissions from the information in this Presentation.

THIRD PARTY INFORMATION This Presentation also contains or references certain market, industry and peer group data which is based upon information from independent industry publications, market research, analyst reports and surveys and other publicly available sources. Although the Corporation believes these publications and reports to be reliable, it has not independently verified any of the data or other statistical information contained therein, nor has it ascertained or validated the underlying economic or other assumptions relied thereon by these sources and cannot, and does not, provide any representation or assurance as to the accuracy or completeness of the information or data, or the appropriateness of the information or data for any particular analytical purpose, and accordingly, disclaims any liability in relation to such information and data. The Corporation has no intention and undertakes no obligation to update or revise any such information or data, whether as a result of new information, future events or otherwise, except as required by law.

TRADEMARKS AND TRADE NAMES The Corporation owns or has rights to various trademarks, service marks and trade names that it uses in connection with the operation of its business. Solely for convenience, the trademarks, service marks, and trade names referred to in this Presentation may appear without the ®, ™ or SM symbols, but such references are not intended to indicate, in any way, that the Corporation will not assert, to the fullest extent under applicable law, its right to the applicable trademark, service mark or trade name.

IRPC 2024

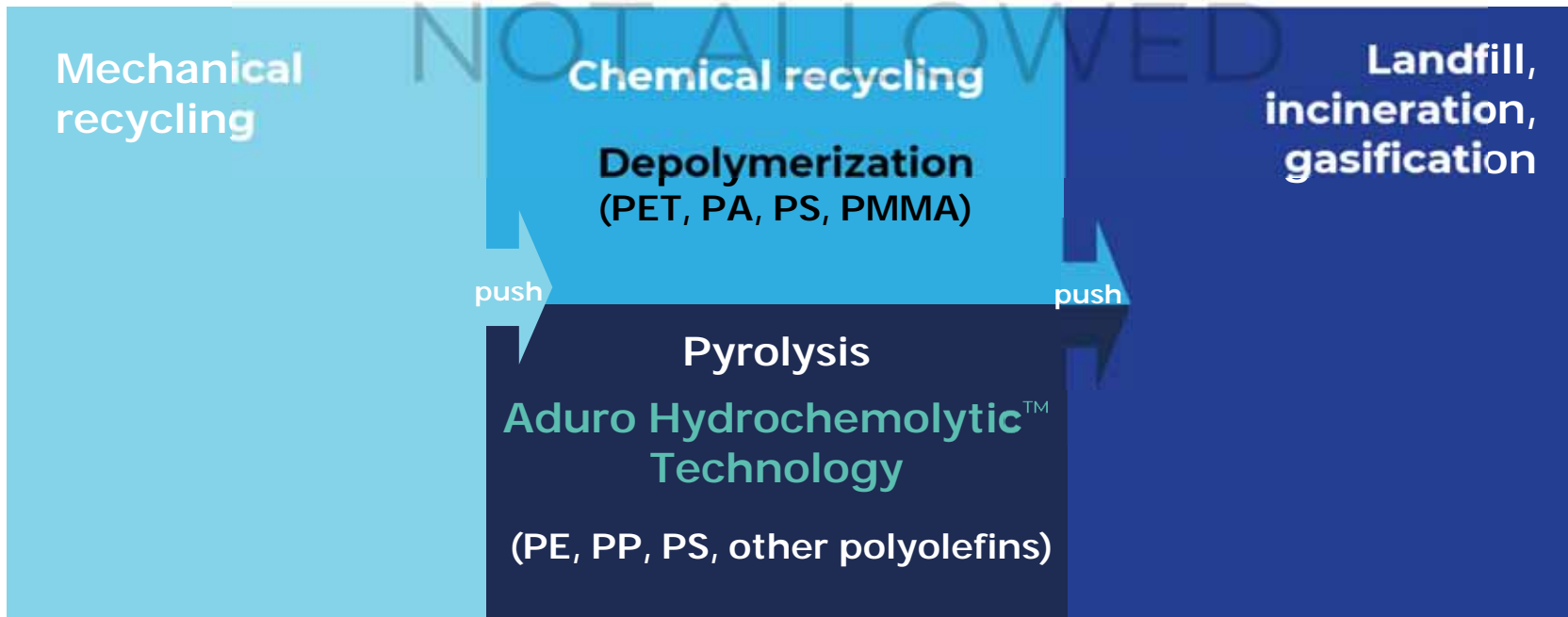
EDITING/PRINTING
NOT ALLOWED

We develop chemical technology platforms that transform low-value materials into higher-value resources with the aim of unlocking significant environmental and economic benefit



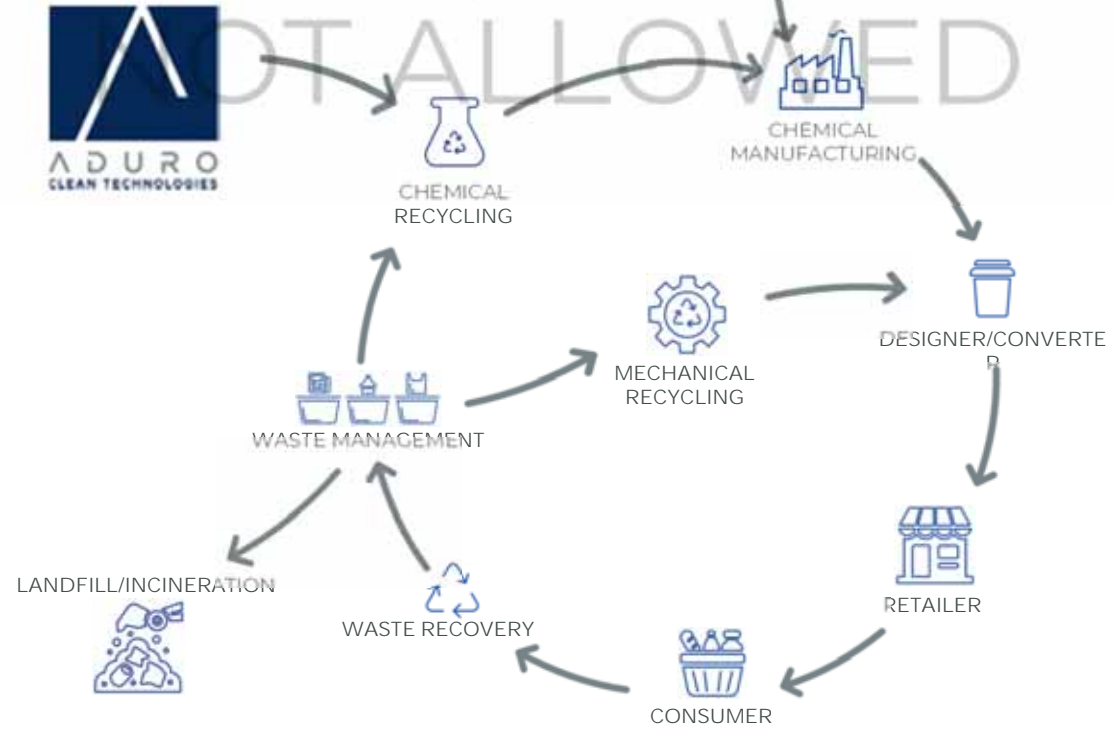
IRPC 2024

Positioning Aduro
In the market of plastic waste management



Positioning Aduro In the Plastics Value Circle

IRPC 2024
EDITING/PRINTING
NOT ALLOWED



IRPC 2024

Positioning Aduro

Within chemical recycling of polyolefins

THERMOLYSIS / PYROLYSIS

- More than 100 companies, often with strong partners
- Highly innovative solutions to overcome challenges w.r.t. mass and heat transfer
- Very much the same chemistry, including some shortcomings

CHEMOLYSIS



ADURO
CLEAN TECHNOLOGIES

The mission in plastic recycling

An optimized system

Deploy mechanical and chemical recycling in a truly complementary way

Maximize the combined product value, minimize cost

Co-optimize collection and sorting for this purpose

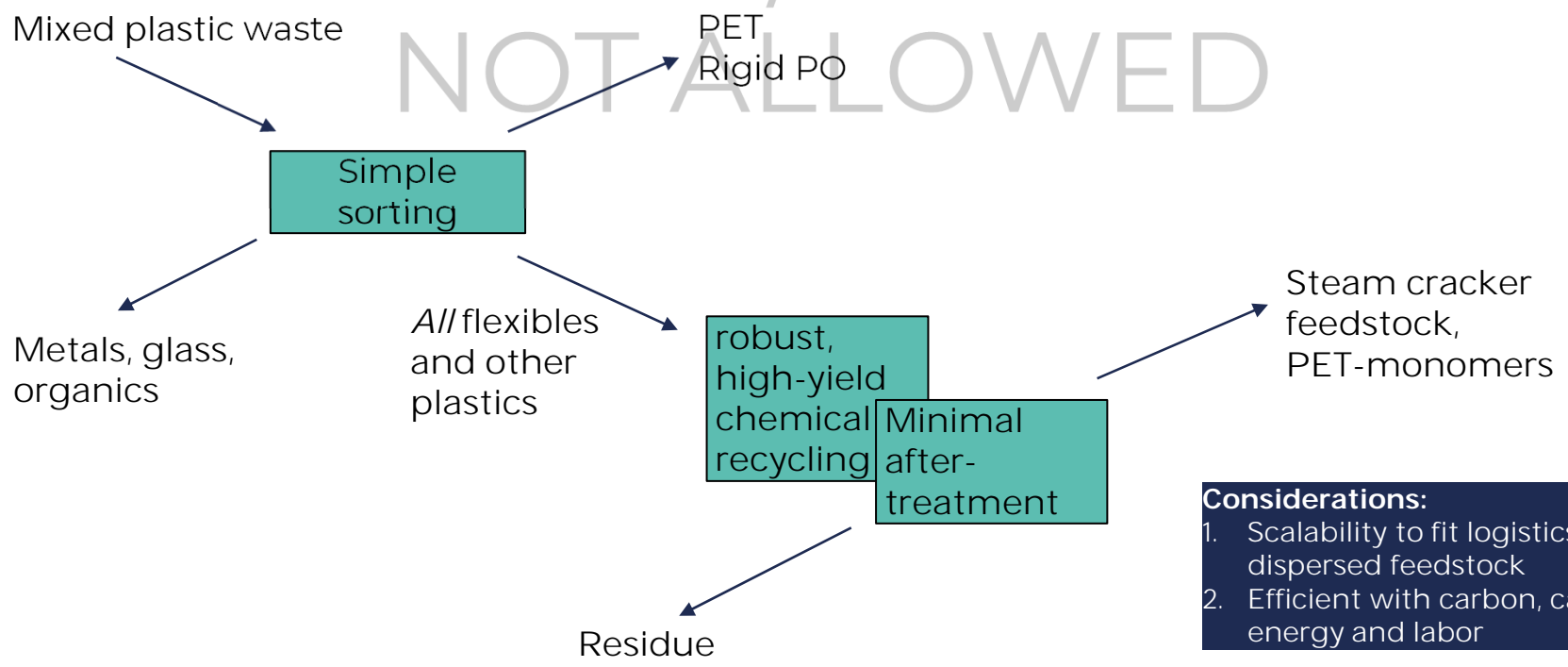
What does not help:

1. rejects that can only be incinerated or landfilled
2. additional process steps
3. recycle loops



© 2023 ADURO CLEAN TECHNOLOGIES, INC. All rights reserved.

A sketch of a possible system



- Considerations:**
1. Scalability to fit logistics of dispersed feedstock
 2. Efficient with carbon, capital, energy and labor

Challenges with pyrolysis in an optimized recycling system

IRPC 2024
EDITING/PRINTING
NOT ALLOWED

Feedstock:

- removal of PET, PA, PVC, multilayers plastics required
- Issues with inks, adhesives,
- Drying required

Reaction:

- High energy demand for temperature and endothermic reactions
- Significant gas and coke formation

Cleanup:

- hydrotreatment to remove olefins and impurities
- additional Capex, vulnerable catalyst and hydrogen supply

Plastic waste
sorting &
cleaning



Chemical
breakup
step



Post-
treatment

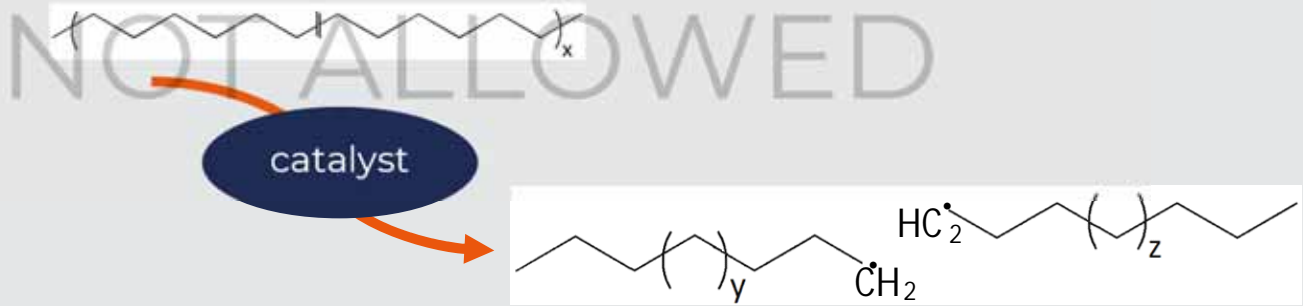


to steam
cracker

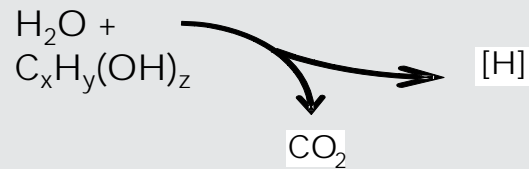
The Aduro Hydrochemolytic™ Technology (HCT)

From polyolefin straight to paraffins

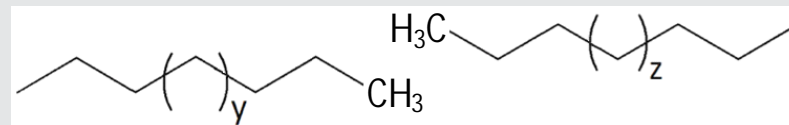
Catalyzed
Deconstruction of
Polymer



Aqueous reforming
of organic hydroxy
component



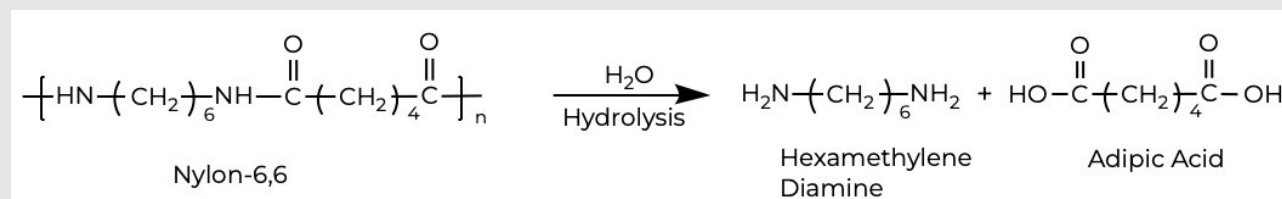
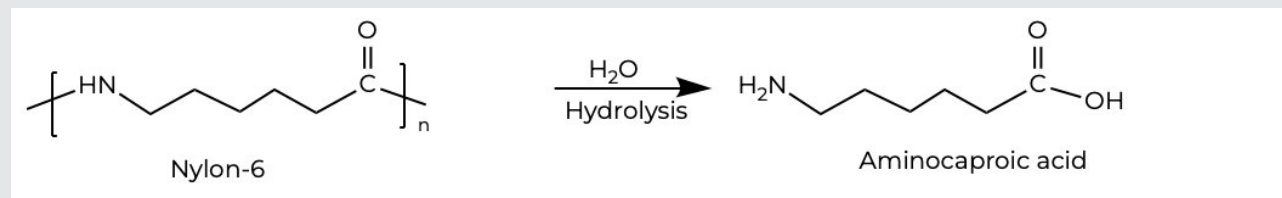
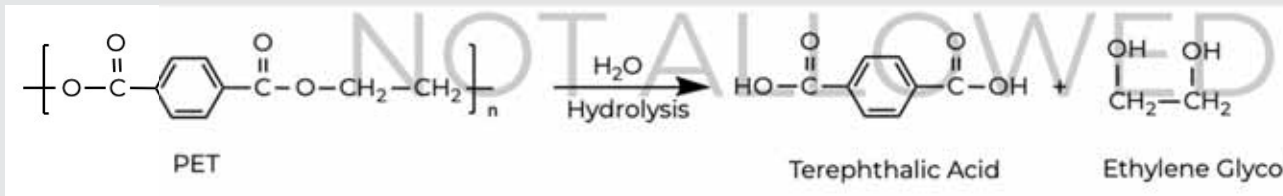
Quenching of
Reactive
Intermediate



Lower molecular weight saturated hydrocarbons

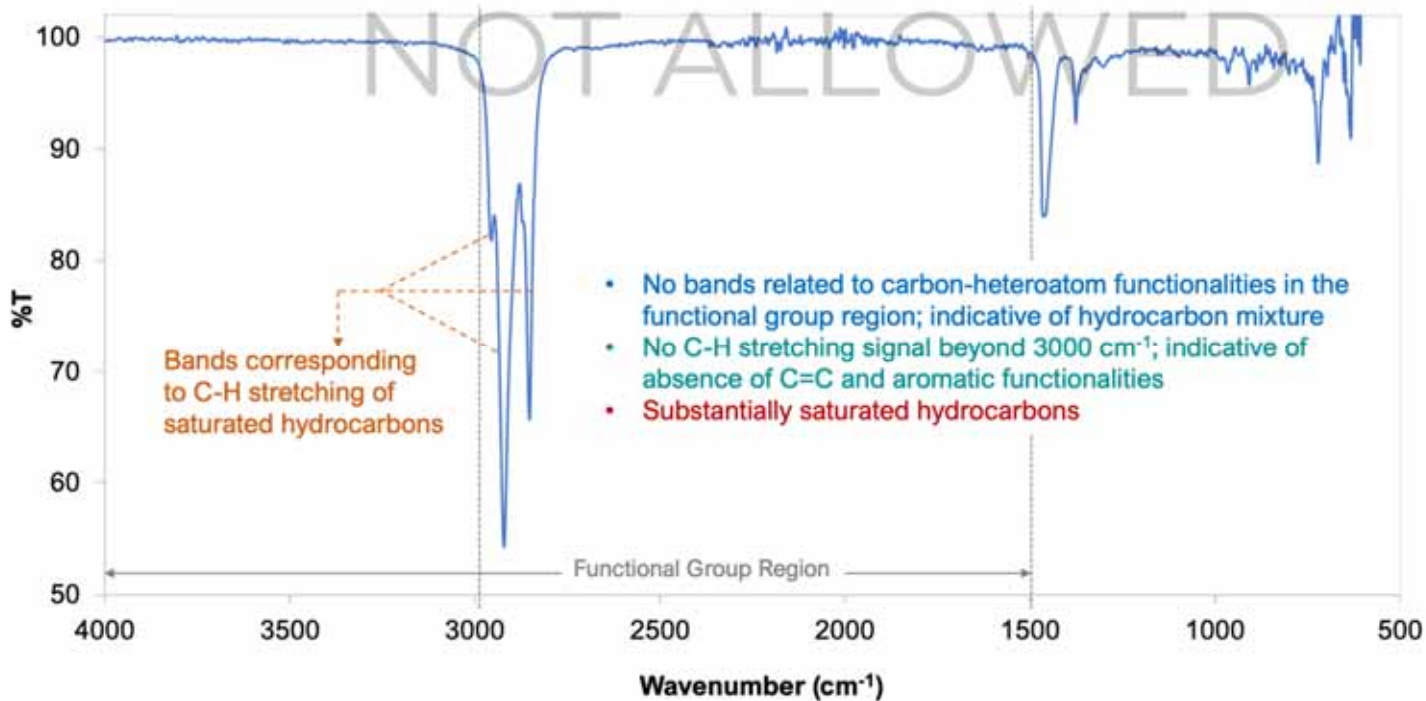
Aduro HCT

Parallel hydrolysis of condensation polymers



The Aduro Hydrochemolytic™ Technology

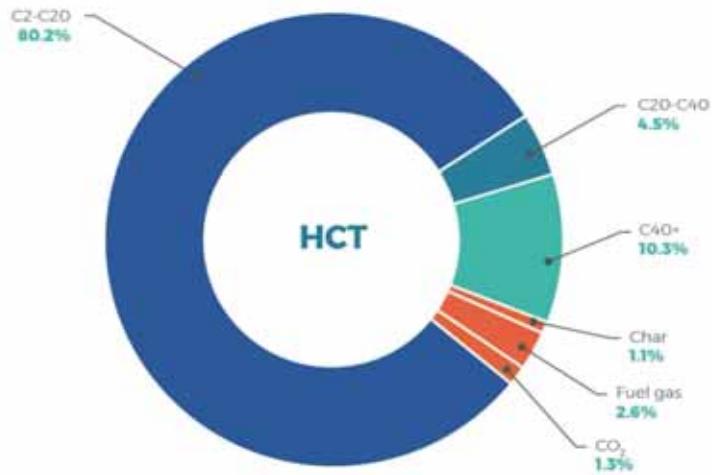
Low on olefins, aromatics, oxygen



The Aduro Hydrochemolytic™ Technology

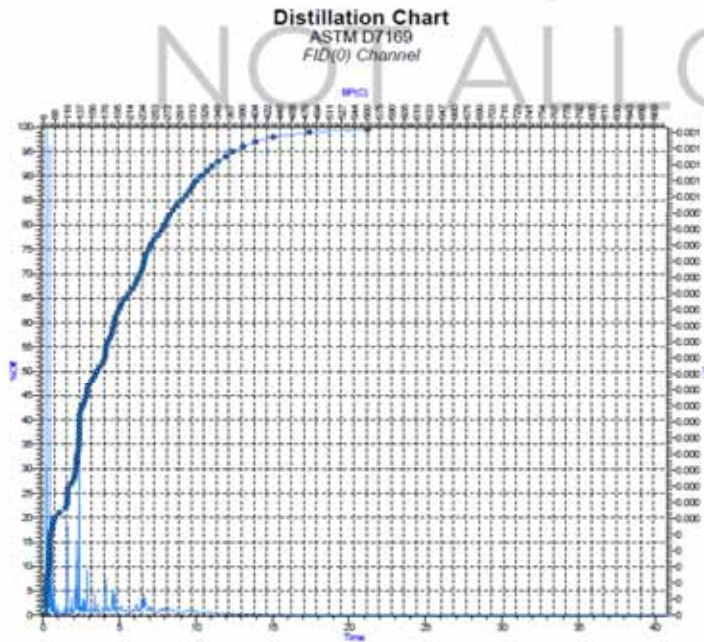
Low formation of fuel gas and coke

95% valuable hydrocarbons
for new plastic products



The Aduro Hydrochemolytic™ Technology

High-yield of steam-cracking range paraffins

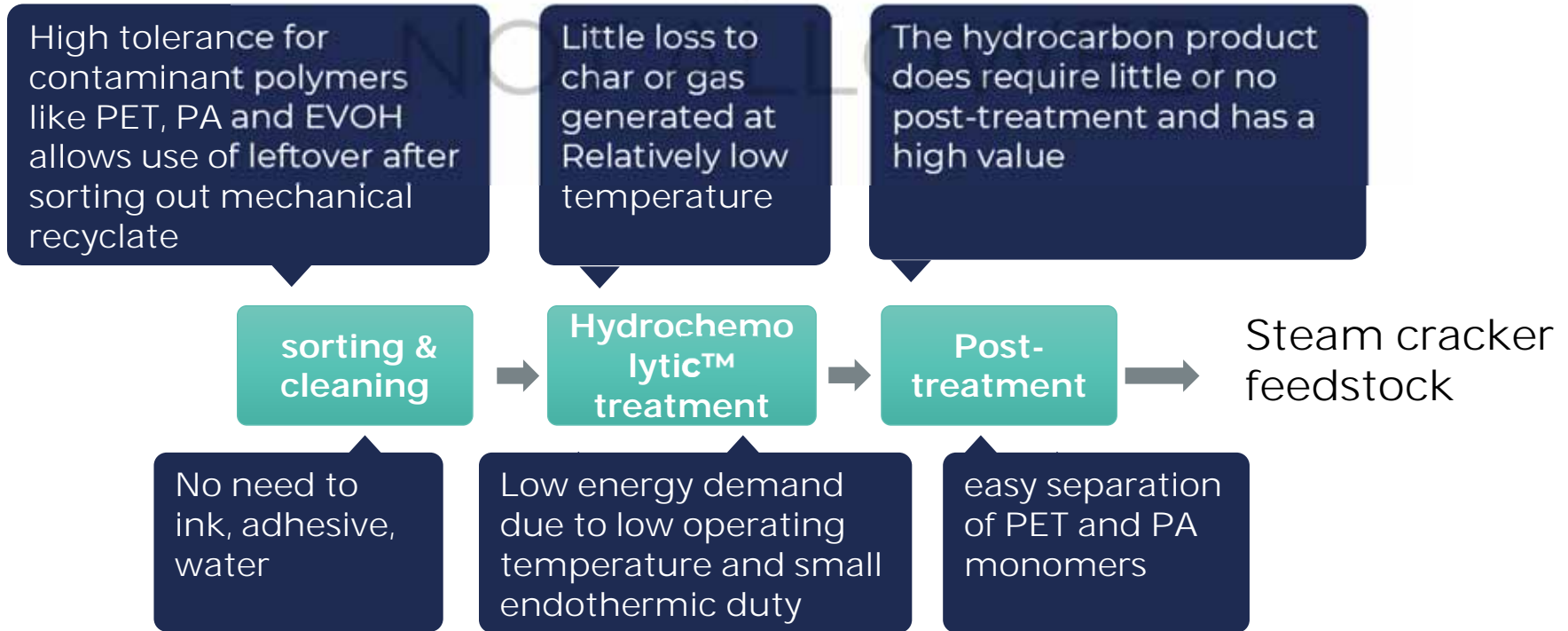


Cut Point Table-3 (%Off)
ASTM D7169
FID(0) Channel

Cut(C)	%Off	Name
(-0.5, 36.1)	0.00	IBP - C5
(36.1, 68.7)	14.88	C5 - C6
(68.7, 98.4)	5.73	C6 - C7
(98.4, 125.7)	6.66	C7 - C8
(125.7, 150.8)	19.78	C8 - C9
(150.8, 174.1)	4.89	C9 - C10
(174.1, 195.9)	9.95	C10 - C11
(195.9, 216.3)	4.54	C11 - C12
(216.3, 235.4)	4.92	C12 - C13
(235.4, 253.5)	5.74	C13 - C14
(253.5, 270.6)	3.39	C14 - C15
(270.6, 286.8)	3.50	C15 - C16
(286.8, 301.9)	2.16	C16 - C17
(301.9, 316.3)	2.82	C17 - C18
(316.3, 330.1)	1.69	C18 - C19
(330.1, 343.2)	1.64	C19 - C20
(343.2, 356.5)	1.29	C20 - C21
(356.5, 368.6)	1.11	C21 - C22
(368.6, 380.1)	0.83	C22 - C23
(380.1, 391.2)	0.67	C23 - C24
(391.2, 401.8)	0.58	C24 - C25
(401.8, 412.0)	0.46	C25 - C26
(412.0, 421.9)	0.40	C26 - C27
(421.9, 431.3)	0.36	C27 - C28
(431.3, 440.4)	0.17	C28 - C29
(440.4, 449.2)	0.17	C29 - C30
(449.2, 457.6)	0.16	C30 - C31
(457.6, 465.7)	0.15	C31 - C32
(465.7, 474.0)	0.16	C32 - C33
(474.0, 481.0)	0.13	C33 - C34
(481.0, 489.0)	0.08	C34 - C35
(489.0, 496.0)	0.04	C35 - C36
(496.0, 503.0)	0.04	C36 - C37
(503.0, 509.0)	0.04	C37 - C38
(509.0, 516.0)	0.04	C38 - C39
(516.0, 522.0)	0.04	C39 - C40
(522.0, 528.0)	0.04	C40 - C41
(528.0, 534.0)	0.04	C41 - C42

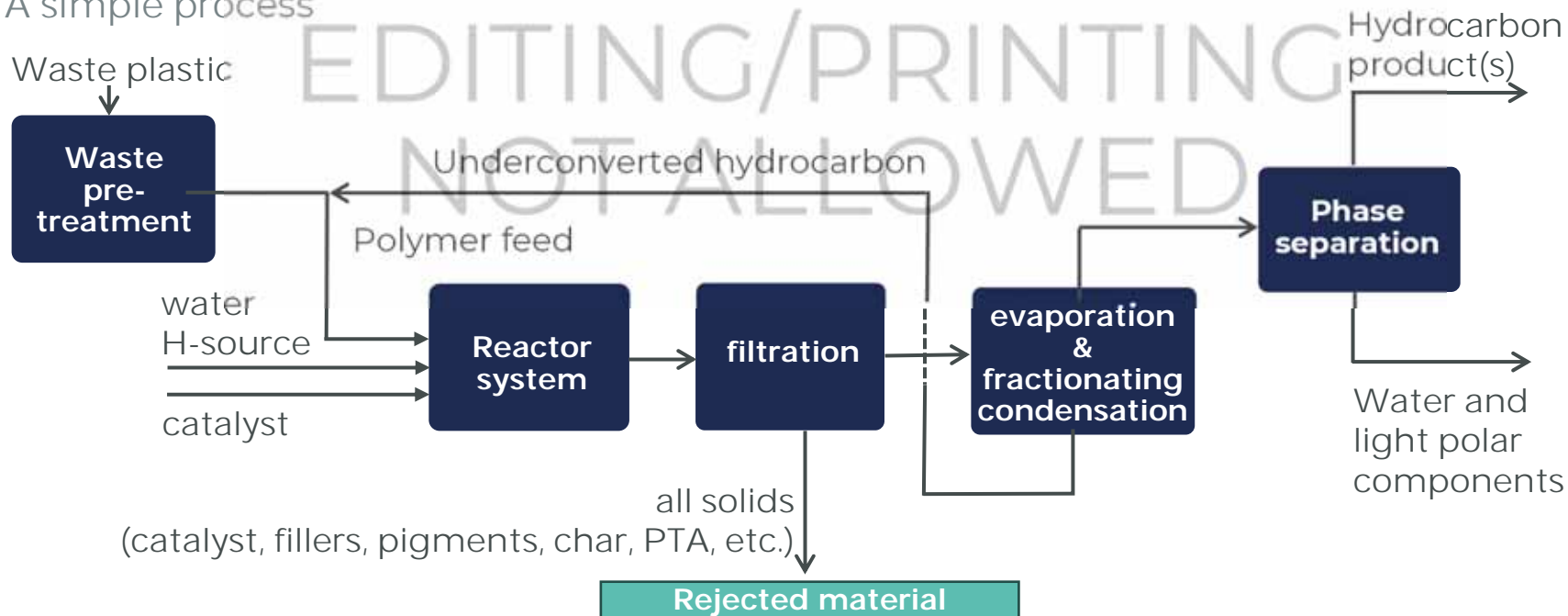
The Aduro Hydrochemolytic™ Technology

Advantages for an optimized plastic recycling system



The Aduro Hydrochemolytic™ Technology

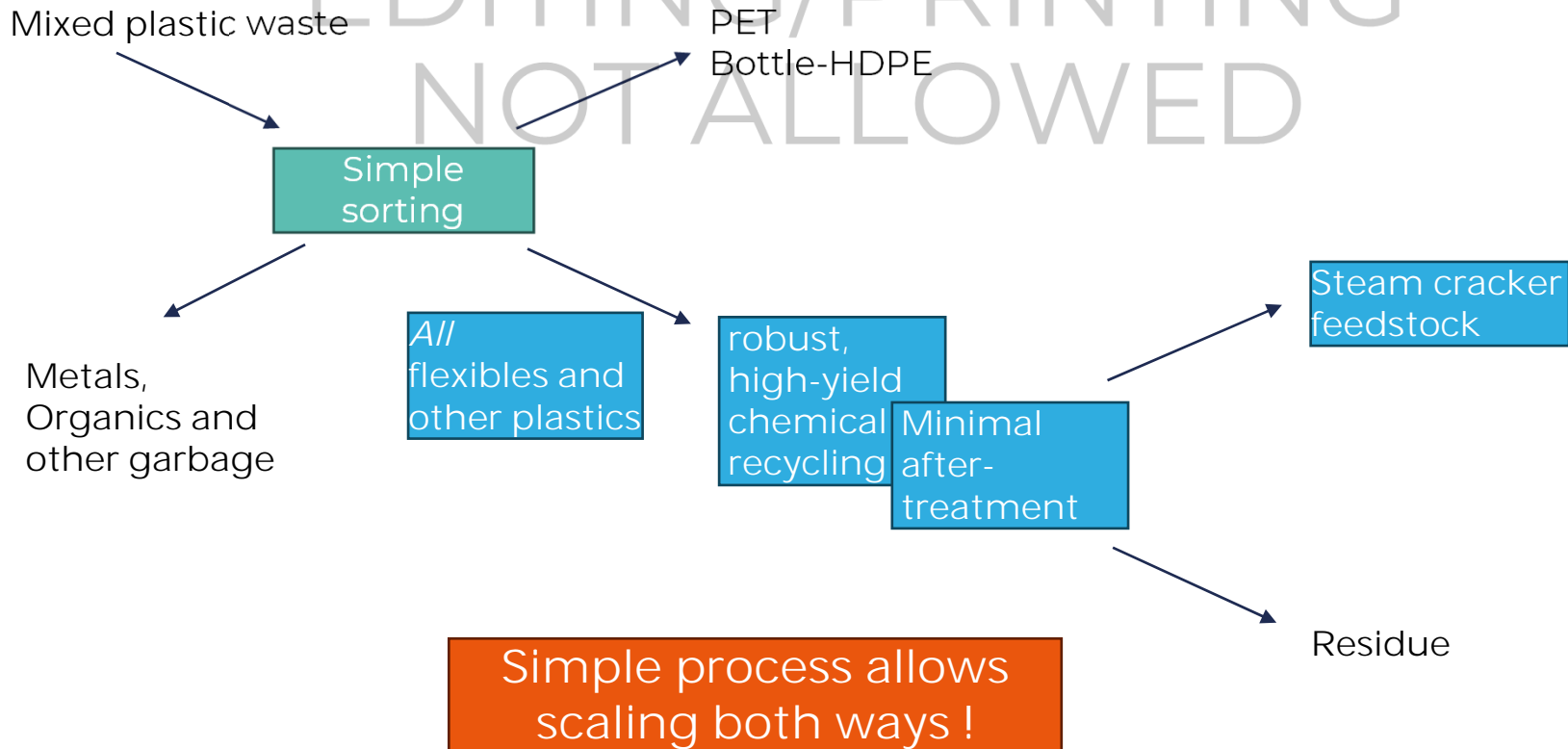
A simple process



1. Cheap, non-toxic catalyst used once-through
2. Water and H-source in single digit percentages
3. Minimal recycle of underconverted hydrocarbon
4. Low energy input, essentially electric
5. Little gas to deal with



A system with Aduro's HCT as anchor technology



A technology company

Continuous investment in IP for new markets



upgrading of bitumen

reducing viscosity and other bitumen properties.

Renewable chemicals & fuels

Conversion of vegetable oils to biodiesel, SAF and bio-naphtha

Rubber materials

Chemical recycling of vulcanized and non-vulcanized rubber

BTX Platform chemicals

BTX chemicals from waste plastic and renewable oil

Making the News

IRPC 2024
EDITING/PROOFING
NOT ALLOWED

Aduro Clean Technologies files **new patent** application to transform waste plastics and renewable oils into high value **BTX chemicals**



Shreshth Adhikari | Ashi Purohit | Satyarth Dixit | Manish Tyagi

“ This new patent application filing formally expands the Aduro “Clean Technologies” theme beyond its unique Hydrochemolytic™ technology platform. Importantly, it signals the Company’s mission and the capability of our scientists and engineers to continue developing consequential, new technology.”

Manish Tyagi,
Co-Founder & Principal Scientist

ADURO
CLEAN TECHNOLOGIES

The Between Chemistry.

adurocleantech.com

CSE: ACT | OTCQX: ACTHW | FSE: A056

Aduro Clean Technologies Announces **Filing of Registration Statement** in Connection with Proposed **Initial Public Offering** in the United States



ADURO
CLEAN TECHNOLOGIES

The Between Chemistry.

adurocleantech.com

CSE: ACT | OTCQX: ACTHW | FSE: A056

ADURO
CLEAN TECHNOLOGIES

Aduro Clean Technologies Enters New Phase of **Collaboration with TotalEnergies**



The Between Chemistry.

adurocleantech.com

CSE: ACT | OTCQX: ACTHW | FSE: A056

In collaboration with



TotalEnergies





IRPC 2024
ENCLOSING
ALLOWED

THANK YOU!

Eric Appelman
Chief Revenue Officer
eappelman@adurocleantech.com

CONTACT

Ofer Vicus
Chief Executive Officer
ovicus@adurocleantech.com

Abe Dyck
Head of Corporate Development
adyck@adurocleantech.com



adurocleantech.com