

PARIS PACKAGING WEEK2025



Plastic Waste Management: A Global Issue

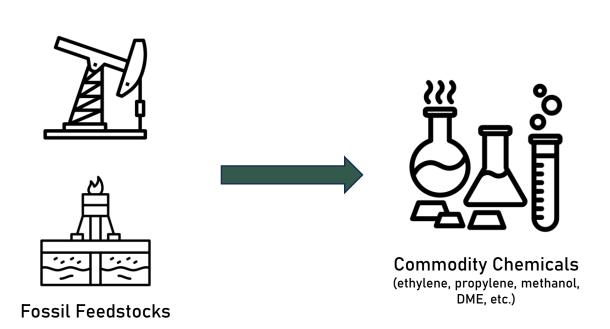


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Plastic Waste Produced (MT/year)	>40 mn	>16 mn
Landfilled	85%	25%
Incinerated	10%	42.5%
Recycled	5-6%	32.5%

Fossil-Heavy Chemical Manufacturing

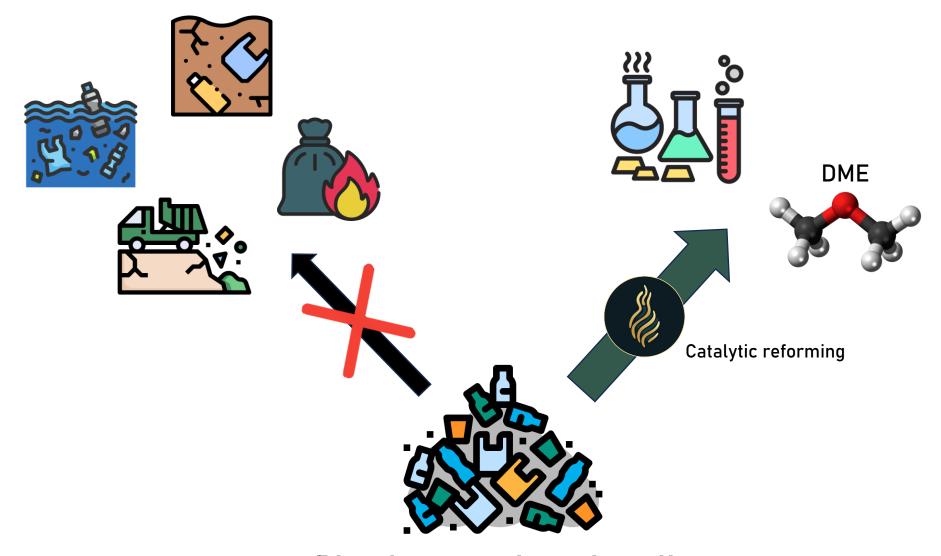
GHG: greenhouse gas







Rise Reforming Tackles Both



Plastic waste is a virtually unlimited <u>resource</u>

Meet the Rise Reforming Team

Founders from across the world



George Rose, CEO

Nexamp Mantel

Highland

Boston, MA



Lucas Zubillaga, CTO





Madrid, Spain



Jona van Oord, COO



Maastricht, Netherlands

Advised by chemical experts



Dr. Cafer T. Yavuz



Professor of chemistry @ KAUST



Dr. Mark P. Stoykovich



Professor, Molecular Engineering @ UChicago



William A. Frauenheim



VP of Operations @ Diversified CPC (largest aerosol propellant manufacturer in North America)



DME Target Markets

Propane blending







less emissions per
MJ vs pure
propane

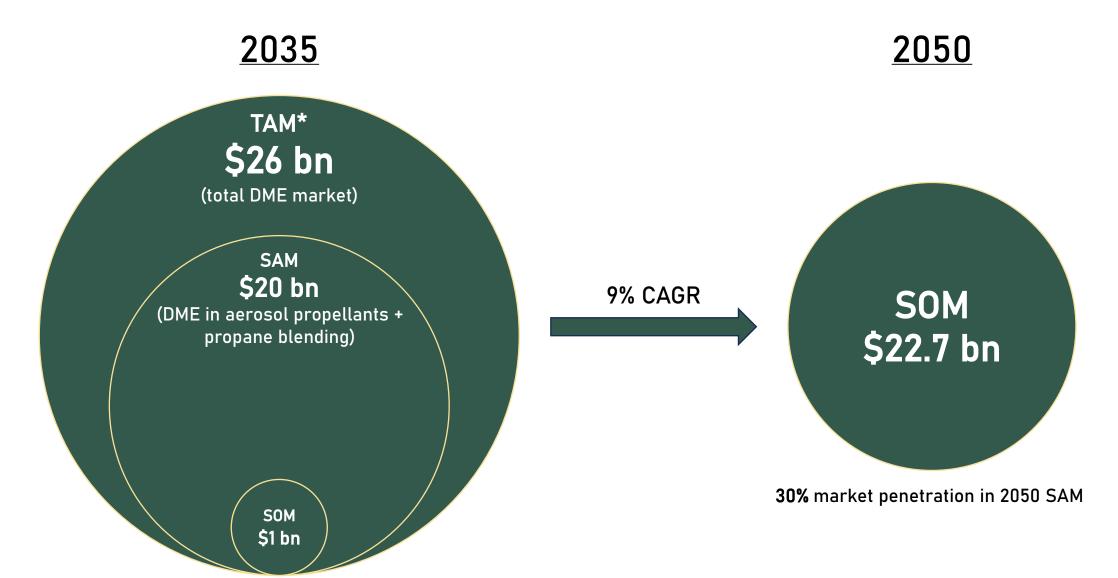
<u>Aerosols</u>







DME Market Outlook



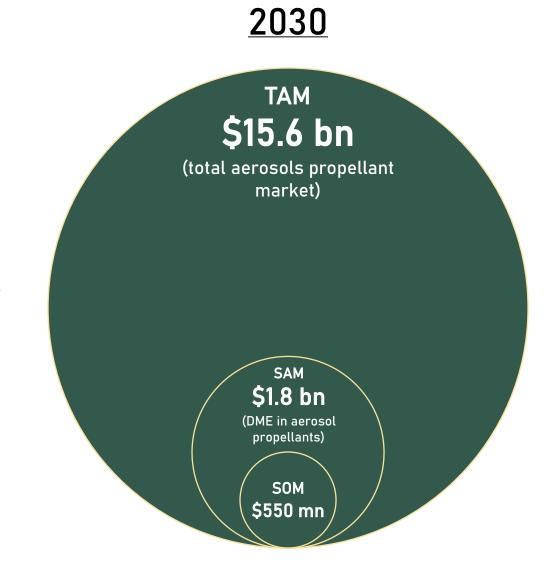
Aerosol Market Outlook

2022

TAM \$9.5 bn (total aerosol propellant market) SAM \$1.1 bn (DME in aerosol propellants)

Overall: 6.4% CAGR

DME: 7.5% CAGR



A Modular Solution













modules

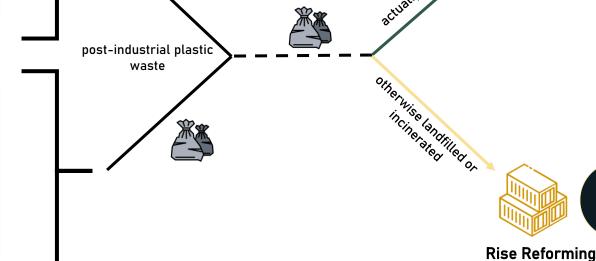
Feedstock Sourcing Strategy



Cleanest feedstock possible

Plastic packaging manufacturers





Retailers, distributors

Goal: repurpose plastic waste without disrupting recycling efforts



A Carbon Negative Alternative

cnDME = carbon negative dimethyl ether

1 kg of cnDME



AVOIDS

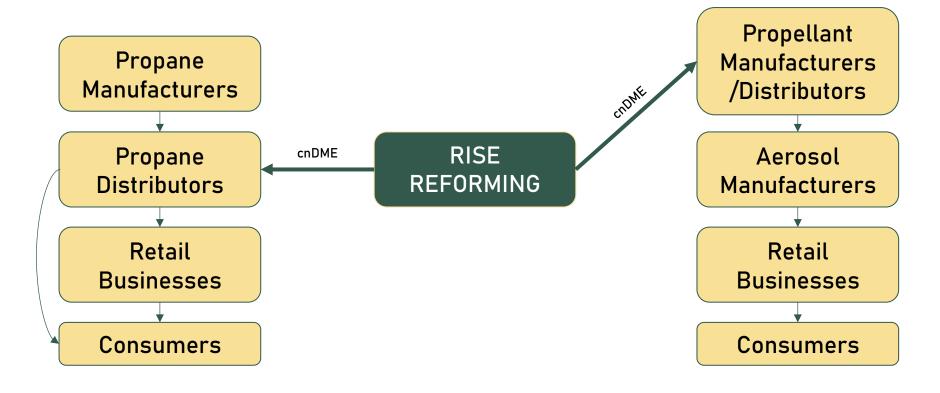


	Natural gas to DME	Rise Reforming's cnDME
Lifecycle emissions (kg CO ₂ eq/kg DME) ^a	3.00	-4.5 ^b

Our Place in the Supply Chain

Propane blending

<u>Aerosols</u>



"We would be interested in carbon negative DME as a company"

- Director at major propane distributor

"We agree to purchase cylinder quantities of the cnDME product for quality evaluation and commercial applicability"

- Executive at major propellant manufacturer

Our Future Impact

MT = metric ton



Traction







November 7th: winners of the FEA 2025 Start-up Award. Booth and presentation at Paris Packaging Week 2025 (now!)





November 11th: **recipients** of DOE voucher for commercialization support. Up to \$50,000 in contractual work

5 Letters of Intent (LOIs) secured to date:

- 2 -> plastic packaging producers
- 1 -> aerosol propellant manufacturer
- 1 -> thermal cracking experts
- 1 -> large maritime company (methanol)









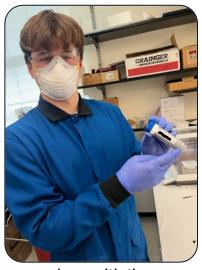
Progress and Timeline

Development and construction of lab-scale system (\$85,000)









Phase I setup

Jona with the catalyst

