



# Investor Presentation

The world's leading carbon negative materials company

*February 2021*

# Forward Looking Statements and Disclaimers

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# Risk Factors Summary

*Investing in this transaction involves a high degree of risk. Below is a summary of certain factors that make an investment in this transaction speculative or risky. This summary is not comprehensive. Additional discussion of the risks and uncertainties summarized in this risk factor summary, and other risks and uncertainties relevant to this transaction, will be included under the heading “Risk Factors” contained in the proxy statement/prospectus related to this transaction.*

Origin is an early stage company with a history of losses and its future profitability is uncertain.

Origin’s financial projections rely in part on assumptions about customer demand based on ongoing negotiations and indications of interest from potential customers. Origin’s inability to secure such customers could have an adverse impact on its financial condition and results of operations, and cause such projections to materially differ. Origin’s financial projections are also subject to other significant risks, assumptions, estimates and uncertainties, and may differ materially from actual results.

Origin may be unable to manage rapid growth effectively.

The loss of one or more of Origin’s significant customers, a significant reduction in their orders, their inability to perform under their contracts, or a significant deterioration in their financial condition could have a material adverse effect on Origin’s business, results of operations and financial condition.

Demand for Origin’s products is uncertain, and any change in such demand could materially impact Origin’s business, results of operations and financial condition. The market for Origin’s products is new and subject to significant risks and uncertainties.

Construction of Origin’s plants may not be completed in the expected timeframe or in a cost-effective manner. Any delays in the construction of Origin’s plants could severely impact Origin’s business, financial condition, results of operations and prospects.

Origin has not produced its products in large commercial quantities.

The technology for Origin’s current products is new and the performance of these products may be uncertain.

Origin’s industry is highly competitive, and Origin may lose market share to producers of products that can be substituted for its products, which may have an adverse effect on its results of operations and financial condition.

Increases in the costs of Origin’s raw materials may occur, which may have an adverse effect on Origin’s business if those costs cannot be passed through to Origin’s customers.

Maintenance, expansion and refurbishment of Origin’s facilities, the construction of new facilities and the development and implementation of new manufacturing processes involve significant risks, which may have an adverse effect on Origin’s results of operations and financial condition.

Compliance with extensive environmental, health and safety laws could require material expenditures, changes in Origin’s operations or site remediation.

Origin’s business relies on intellectual property and other proprietary information, and Origin’s failure to protect its rights could harm its competitive advantages with respect to the manufacturing of some of its products, which may have an adverse effect on Origin’s results of operations and financial condition.

Origin may require significant capital investment into the research & development of intellectual property and other proprietary information to improve and scale its technological processes, and failure to secure such investment could severely impact Origin’s business.

Origin relies in part on trade secrets to protect its technology, and any failure to obtain or maintain trade secret protection could limit Origin’s ability to compete.

Origin is dependent on management and key personnel, and Origin’s business would suffer if it fails to retain its key personnel and attract additional highly skilled employees.

If the benefits of the business combination between Origin and Artius do not meet the expectations of investors or securities analysts, the market price of the combined entity’s securities may decline.

The combined entity will incur significant increased expenses and administrative burdens as a public company, which could have an adverse effect on its business, financial condition and results of operations.

The unaudited pro forma financial information included herein may not be indicative of what Origin’s actual financial position or results of operations will be.

# Transaction Overview

## Overview

- Founded in 2008, Origin is the world's leading carbon negative materials company with a mission to enable the world's transition to sustainable materials
- Artius is a publicly listed special purpose acquisition company with \$725Mn cash in trust
- Closing is subject to Artius having a minimum cash amount of \$525Mn across PIPE and cash remaining in trust account after giving effect to any redemptions

## Valuation

- \$1,843Mn pro forma equity value of combined company<sup>1</sup>
- \$999Mn Enterprise Value, implies 1.2x 2026E Revenue and 3.4x 2026E EBITDA<sup>1</sup>
- Earnout of 29.5Mn shares vesting equally based on share price thresholds of \$15, \$20 and \$25 per share within 3, 4 and 5 years, respectively<sup>2</sup>

## Capital Structure

- Origin Materials shareholders rolling 100% of their equity
- Transaction, inclusive of \$200Mn PIPE financing, expected to result in \$863Mn of cash<sup>3</sup> to balance sheet, anticipated to fully fund company's operations and capital expenditures until EBITDA positive

## Ownership

- 42.4% existing shareholders; 46.7% SPAC shares; 10.9% PIPE investors<sup>4</sup>

**Artius has identified Origin Materials as a compelling investment opportunity and believes its disruptive platform technology is uniquely positioned to decarbonize the materials industry supply chain**

1. At a price of \$10.00 per Artius share and assumes no redemption of public shares. Refer to slide 36 for additional detail.

2. Consists of 25.0Mn shares to Origin Shareholders and 4.5Mn shares to Artius upon release from forfeiture provisions upon achievement of earnout thresholds.

3. Refer to slides 35 and 43 for additional detail. Assumes no redemption of public shares.

4. Assumes no redemption of public shares, that none of the 29.5Mn earnout shares are issued and a PIPE of \$200Mn.

# Visionary leadership team with long history of creating shareholder value



**John Bissell**  
Founder & Co-CEO

- Founded Origin Materials in 2008
- Featured on Forbes 30 under 30
- B.S. Chemical Engineering, UC Davis



**Rich Riley**  
Co-CEO

- Former CEO Shazam and senior executive at Yahoo!
- 20+ years managing rapid-growth organizations
- Featured on Forbes 40 under 40 and Billboard's Power 100
- Investor in Origin since 2010
- B.S. Economics, Wharton School, UPenn



**Nate Whaley**  
CFO

- 20 years C-Suite experience scaling complex high growth business across industries
- B.S. Civil & Environmental Engineering; MBA, UC Davis



**Charles Drucker**  
Executive Chairman

- Formerly Chairman & CEO of Vantiv/WorldPay; global executive with extensive Fortune 500 network
- Over 30 years as highly successful technology/fin-tech operator; created over \$40bn of value for Vantiv/WorldPay over a 10-year period as CEO



**Boon Sim**  
CEO & CFO

- Managing Partner of Artius Capital Partners
- 30+ years of investment/financial services experience; formerly President, Head of Americas and International Groups of Temasek and Head of Global M&A of Credit Suisse/First Boston
- Board member of Canadian Pension Plan Investment Board ("CPPIB")



# Artius Acquisition Inc. Overview

## Overview

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- Artius Acquisition Inc. (“Artius”) was founded in July 2020 by Charles Drucker and Boon Sim to invest in disruptive platform technologies with large TAM and strong secular tailwinds, led by exceptional management teams
- Artius uses a methodical and proprietary framework and its broad network to originate and evaluate target companies; numerous companies to date have been evaluated or diligenced

## Due Diligence on Origin

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- Conducted private equity-style due diligence over the past 3 months
- Assisted by domain experts from a global consulting firm, a specialist consulting firm with relevant industry expertise, leading law firms, KPMG, Franklin Associates, Quantis and Wolf Greenfield
- Made numerous diligence calls to current and potential customers and industry participants including CEOs and key decision makers to independently evaluate technology and business model

## Value-Add

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- Seasoned executives with expertise in investing, operating and transforming disruptive companies and helping them scale to become global market leaders and world-class public companies
- Track record of creating significant shareholder value organically and inorganically by using levers of operational excellence, investing in R&D / technology and opportunistic plays
- Deep and extensive Fortune 500 C-suite and boardroom relationships; provides access at the highest level to generate immediate traction for any business opportunity and attract the best talent for the company
- Strong and broad network of direct investor relationships with long-term pension and sovereign funds, large institutional money managers, foundations and family offices to aid in the creation of a stable and long-term shareholder base

## Investment Highlights

- 1 Addressing Enormous and Growing Materials Economy**

Core products are carbon negative drop-in replacements serving a ~\$1Trn+ market – with diverse applications expected to deliver growth for years to come
- 2 Industry Disrupting Technology Supported by Deep Competitive Advantage**

Conversion of biomass feedstocks into drop-in chemicals, competing directly on cost with fossil-based materials while having significant advantage over alternative technologies
- 3 Global Fortune 500 Customers and Investors**

~\$1Bn<sup>1</sup> of signed customer contracts and ~\$400Mn of customer contracts under negotiation
- 4 Funded to Effectively Scale and Commence Commercial Production**

Executing on growth plan with first plant expected to be completed in 2022 and contracted portion of first two commercial plants expected to be 100% sold out in 2022. Full-scale commercial plant expected to be online by 2025
- 5 Experienced Leadership Team with Proven Track Record**

Brings a team of industry veterans and technology leaders with ~250 years of cumulative experience – ready to deliver on its vision and operational priorities

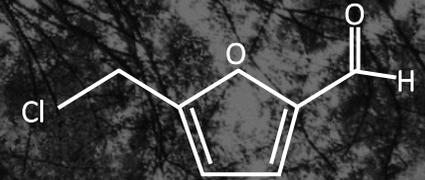
1. Comprised of \$779Mn in offtake agreements, including \$264Mn in customer option, and \$243Mn in capacity reservation. Figures assume maximum offtake amounts and exercise of full customer options. Refer to slide 23 for additional detail.



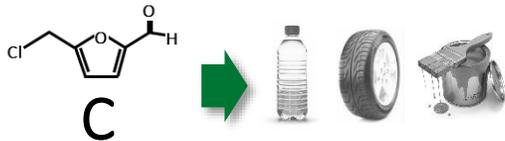
## 1. Introduction to Origin

# Origin Materials – At a Glance

The world's leading carbon negative materials company



## Disruptive Materials Technology Company



Origin produces low and negative carbon materials

## Decarbonizing Platform Technology



Enables customers' net-zero commitments

## Enormous TAM

~\$1+ Trillion

\$390Bn near-term focus in polyesters; \$750Bn across broad range of materials

## Cost advantaged



Timber feedstocks are competitive with oil and ~10x cheaper than bio alternatives

## Global Fortune 500 Customers & Investors

11% Owned by customers who are also investors<sup>1</sup>



## Massive Customer Demand<sup>2</sup>

\$1.4Bn and growing

from a diverse mix of industries

## Protected & Validated Technology

19 Patent Families

Core technology protected in key countries; validated by customers and 3<sup>rd</sup> party experts

## Funded to Commercial Scale<sup>3</sup>

\$863Mn

Origin expected to be fully financed until EBITDA positive

1. Represents combined ownership by PepsiCo, Danone and Nestle prior to this transaction.

2. Includes \$264Mn specified as customer options and \$359Mn in negotiations with potential customers. Figures assume maximum offtake amounts and exercise of full customer options. Refer to slide 23 for additional detail.

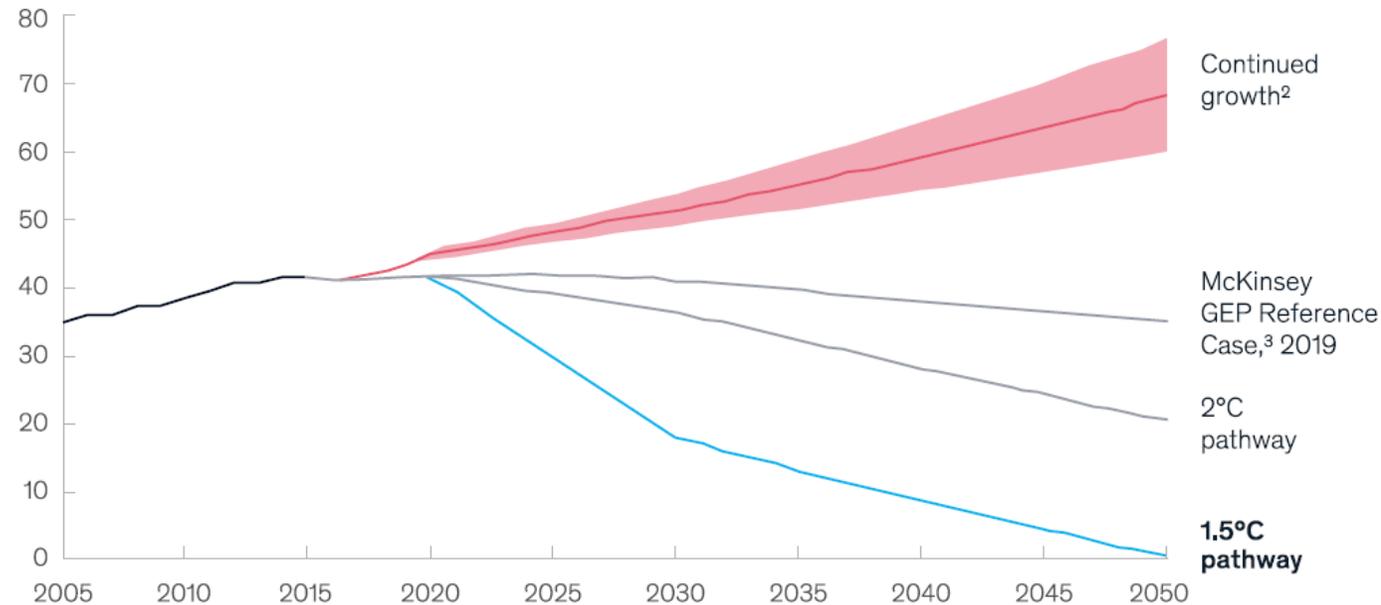
3. Refer to slides 35 and 43 for additional detail. Assumes no Artius share redemption.

Source: Origin Materials.

# The world is drowning in carbon – it needs rapid solutions

## Pathways of global carbon dioxide emissions<sup>1</sup>

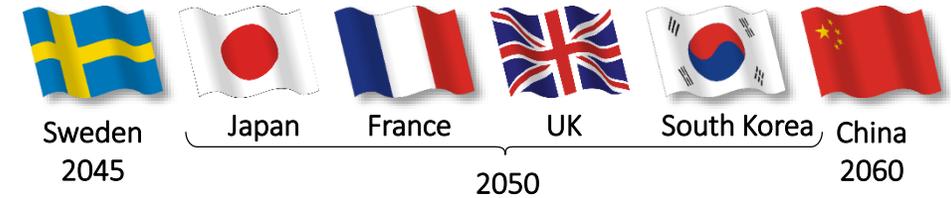
Gt CO<sub>2</sub> per year



1. 2005-2018 emissions from Global Carbon Budget 2019. Emissions from biotic feedbacks not included (e.g.: permafrost thawing, wildfires).  
 2. Average of the IEA WEO 2019 Current Policies Scenario and IPCC RCP8.5 pathway.  
 3. Reference case used is McKinsey's Global Energy Perspective - Reference Case 2019.  
 NB: Projected warming estimated by 2100.

## Select national net-zero commitments

NOT EXHAUSTIVE



## Select investment community reactions



“We are asking companies to disclose a plan for how their business model will be compatible with a net zero economy”  
 – Larry Fink, BlackRock CEO, January 2021

“Vanguard expects companies to disclose to the market how their board oversees climate-related strategy and risk management”  
 – Vanguard, June 2020

Managers Of \$40 Trillion Make Plans To Decarbonize The World  
 – Forbes, September 2020



# Leading institutions are committing to a net zero future

The global industrial complex is committed to decarbonization

2030



**Patagonia**  
Carbon neutral by 2025



**Proctor & Gamble**  
Net zero between 2020 – 2030

**SIEMENS**

**Siemens**  
Net zero by 2030



**LG**  
Carbon neutral by 2030



**IKEA**  
Carbon negative by 2030



**Microsoft**  
Carbon negative by 2030



**Unilever**  
Carbon neutral before 2030

2030-2040



**AT&T**  
Net zero by 2035



**Walmart**  
Net zero by 2040



**PepsiCo**  
Net zero by 2040



**Amazon**  
Net zero by 2040



**Mercedes Benz**  
Net zero by 2040



**Best Buy**  
Net zero by 2040



**General Motors**  
Carbon neutral by 2040

2040 - 2050



**Michelin**  
Net zero by 2050



**BP**  
Net zero by 2050



**Danone**  
Net zero by 2050



**Ford**  
Net zero by 2050



**Nestlé**  
Net zero by 2050



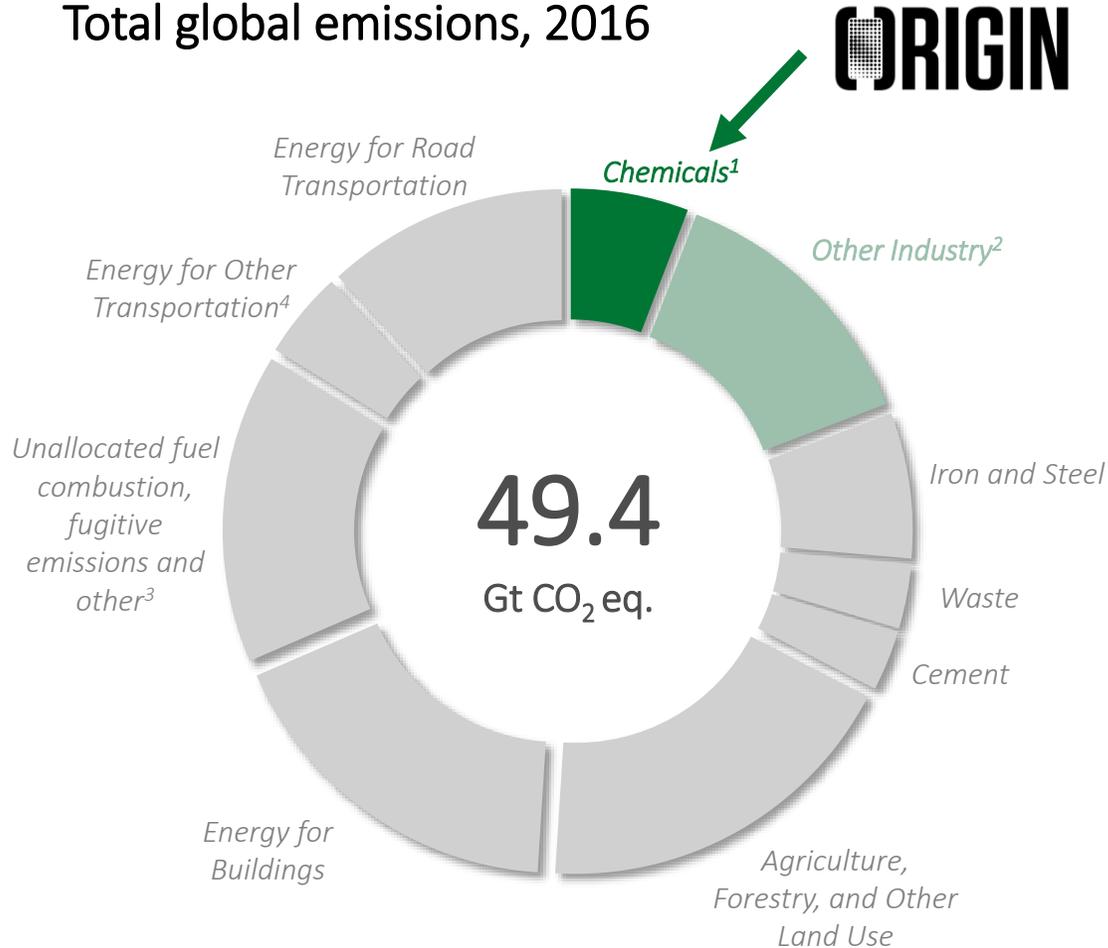
**Nike**  
Net zero by 2050



**Shell**  
Net zero by 2050

# Nearly half of all global emissions come from making products

Total global emissions, 2016



# Origin's mission is to enable the world's transition to sustainable materials

Fossil-based



**10.6Mn**

Daily barrels of oil consumed by the chemicals market

Sustainable-based



**<1%**

Of annually available 900Mn tons of forest residue and wood waste

Emitting



**2.78kg**

Carbon emissions per kg of fossil-based PET produced

Avoiding



**>100%**

Carbon reduction for Origin's PET vs. fossil-based PET

**The Origin platform can replace oil as the foundational feedstock for the materials economy**

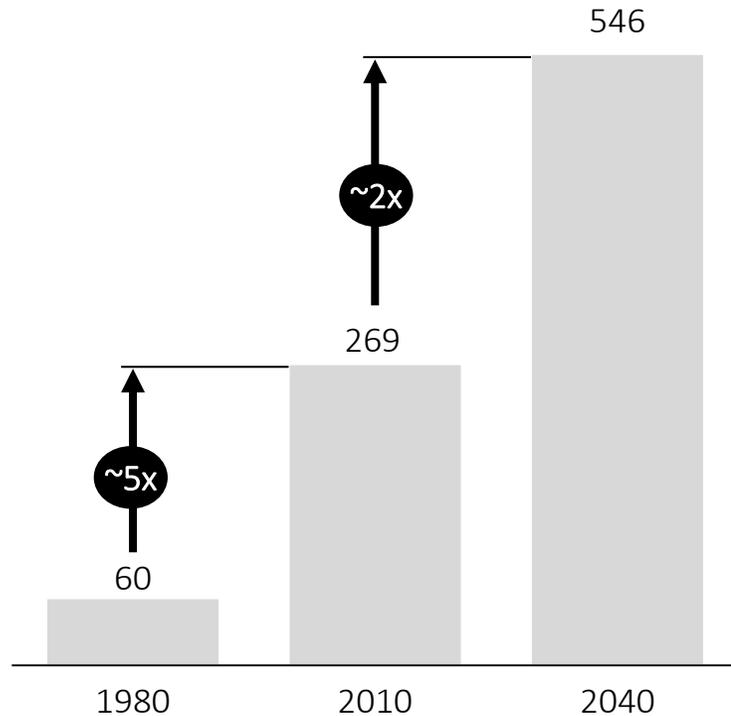
1. Includes energy-related emissions from the manufacturing of chemicals as well as direct industrial process. 2. Includes energy-related emissions in mining and quarrying, construction, textiles, machinery, food and tobacco, paper & pulp and other industries. 3. Includes energy-related emissions from the use of machinery in agriculture and fishing. 4. Includes energy-related emissions in aviation, shipping, rail and pipeline transportation.

Source: Origin Materials estimates, Climate Watch, the World Resources Institute (2020), ourworldindata.org.

# Ubiquitous plastics are a prime target to begin reducing carbon emissions

## Plastics enable modern life...

Million tons



## ... but we need better, scalable solutions



### Drop-in ready – change only happens at scale

Transforming the materials economy won't happen in niche markets. Plastics permeate every sector and Origin's products are supply-chain ready alternatives for fossil-based feedstocks



### Negative-to-low carbon

Sustainably harvested, renewable feedstocks (e.g., forest waste / residues) can convert naturally captured carbon into useable end products



### Sustainable, end of life solutions (recycle first)

Responsible plastics use goes from 'cradle to grave'. Enabling the circular economy through high rates of recycling is a must for any solution

# The Origin platform: 'Once in a planet' shift from fossil to decarbonized materials

Abundant, low-cost, bio-feedstocks



Origin Core Technology



✓ Carbon Negative

✓ Flexible

✓ Lowest Cost, Beats Petroleum

**"CMF"**  
5-Chloro-methyl-furfural

ClCC1=CC=C(C=O)O1

**"HTC"**  
Hydrothermal Carbon

C

Countless products can be manufactured using Origin's carbon negative materials...

NOT EXHAUSTIVE

Textiles and fabrics






Next-gen packaging






Paints, coatings, and epoxies






Filler for tires and more

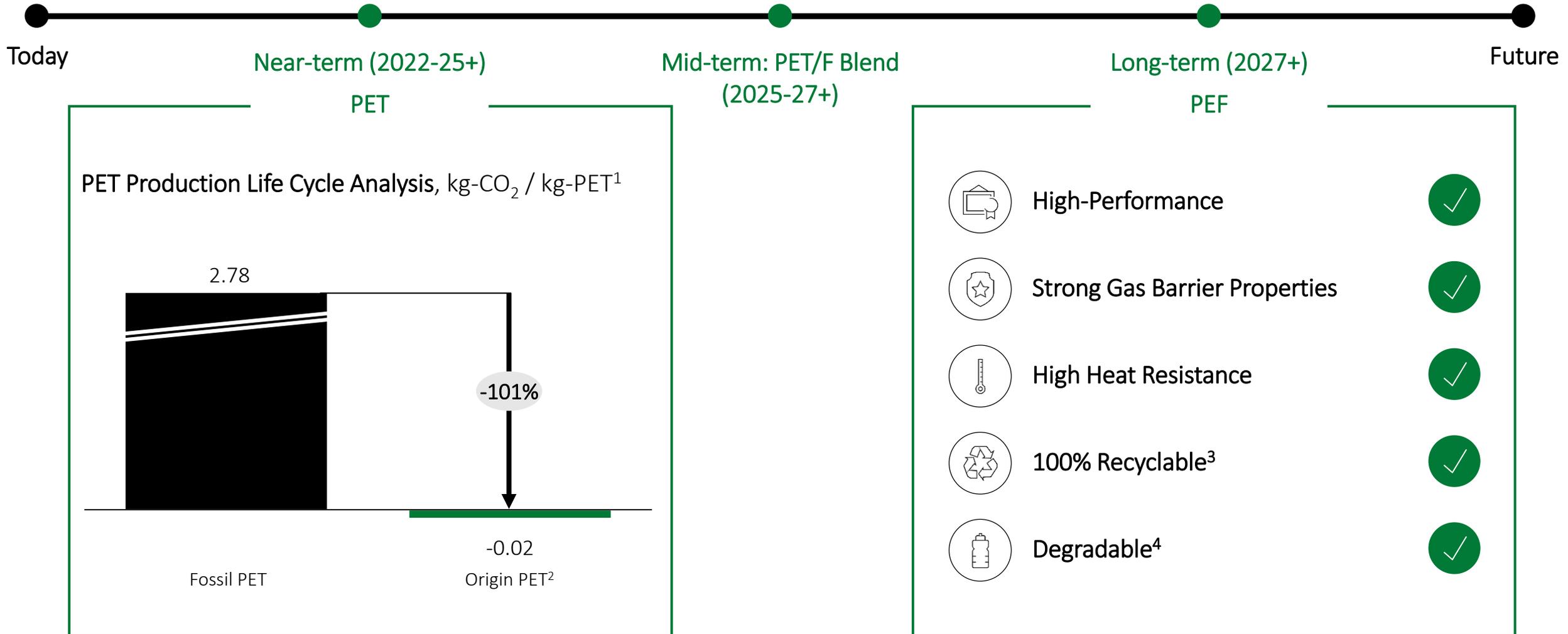
Solid fuels





Agriculture & soil products

# Origin's CMF is a carbon negative solution with a pathway to degradability



1. Process step carbon impacts are derived from Deloitte ISO compliant LCA report. Deviations from supply chain described in LCA report may affect carbon impacts. 2. Southern Pine based bio-PET.

3. PEF can be recycled by the same mechanical methods used for PET. Currently there are no independent PEF recycling stream or U.S. guidelines for blending PEF and PET streams.

4. Further study is necessary to determine if PEF degradation times meet ISO standards.

# Origin's HTC is a diverse, high-potential carbon negative platform material



A drop-in ready, energy dense, fuel alternative

**Net 0** Carbon footprint

**>7%** Annual growth rate of fuel pellet market

A carbon negative solution for food and water treatment

**~500 - 3,000** m<sup>2</sup>/g – Ultra high surface area

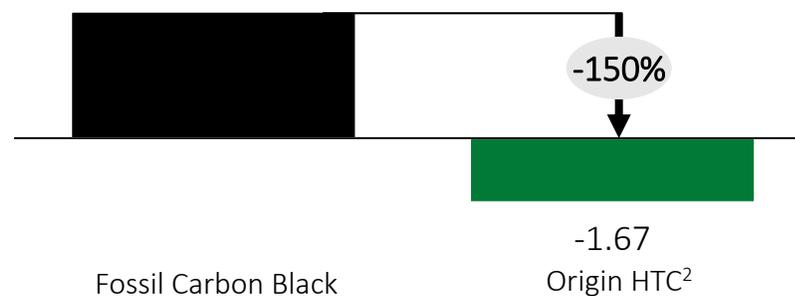
**>8%** Annual growth rate of activated carbon market



A carbon negative carbon black replacement for tires, foams, and dyes

**No Detectable Carcinogens<sup>1</sup>**

Carbon Black Production Life Cycle Analysis, kg-CO<sub>2</sub> / kg-Carbon Black



A next-generation agriculture additive to improve farming efficiency

Key Properties

- Porous, High Surface Area
- Available Water Capacity
- High Cation Exchange

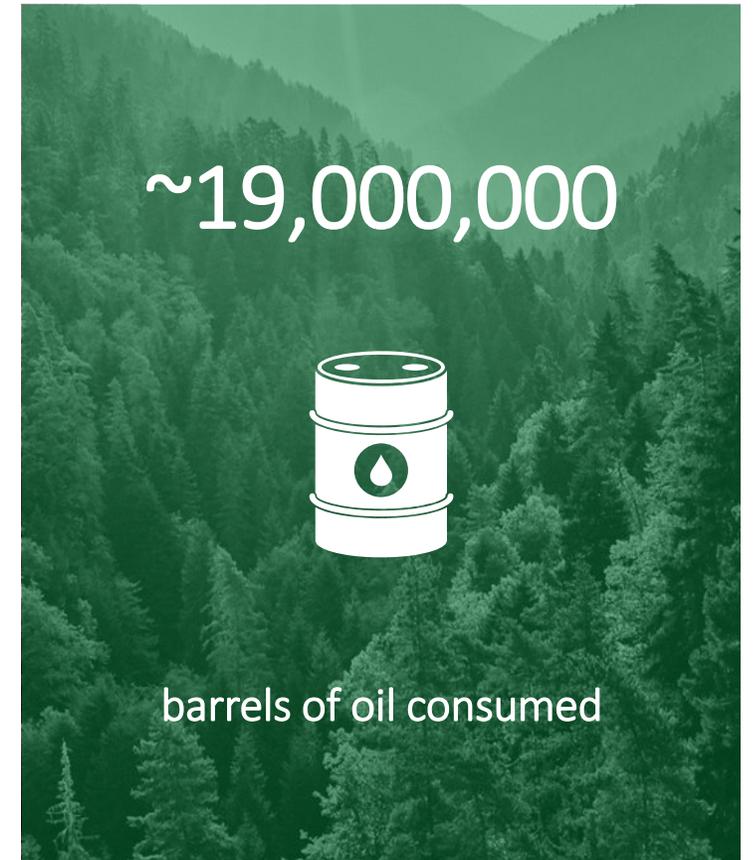
Applications

- Biochar, slow-release fertilizer, microbes / biologics, soil amendment

1. Origin carbon black does not contain any PAH, or polyaromatic hydrocarbons, which are carcinogens found in fossil carbon black.  
 2. Derived from Deloitte ISO compliant LCA report. Deviations from supply chain described in LCA report may affect carbon impacts.  
 Source: Origin Materials, PBL Netherlands Environmental Assessment Agency.

# Origin's platform technology decarbonization impact

By 2030, Origin's operating plants are expected to annually avoid  $\sim 8.3\text{MMT}^1 \text{CO}_2$  equivalent to approximately...



1. Million Metric Tons.

Source: Origin Materials calculations based on 6 commercial scale plants and plant life cycle impact estimates. U.S. Environmental Protection Agency greenhouse gas equivalencies calculation: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

# Estimated total addressable market for Origin products is more than \$1Trn

Origin addresses a growing market with broad applications

Cumulative TAM = >\$1Trn



Markets	Market Size
	\$

PET Fiber	~\$175Bn
-----------	----------

-  Apparel
-  Carpet

PET Resin	~\$145Bn
-----------	----------

-  Food and beverage packaging

Carbon	~\$70Bn
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-  Tires
-  Activated Carbon
-  Foams
-  Fuel pellets

 HTC market  CMF market

Near term focus pre-2030  
>\$390Bn market



Near-term focus TAM is expected to grow by ~\$15Bn annually

# Estimated total addressable market for Origin products is more than \$1Trn

Origin addresses a growing market with broad applications

Cumulative TAM = >\$1Trn



Select Markets | Market Size  
\$

Paints & Coatings | ~\$30Bn

 Colorants

Soil Additives | ~\$40Bn

 Soil Nutrients

PEF | ~\$225Bn

 Apparel  PET Applications  
 Packaging

Epoxies | ~\$15Bn

 Adhesives  
 Coatings

Plasticizers | ~\$18Bn

 PVC Piping

 HTC market  CMF market

Long term focus post-2030  
>\$750Bn market

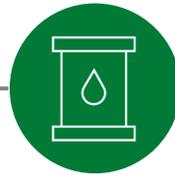
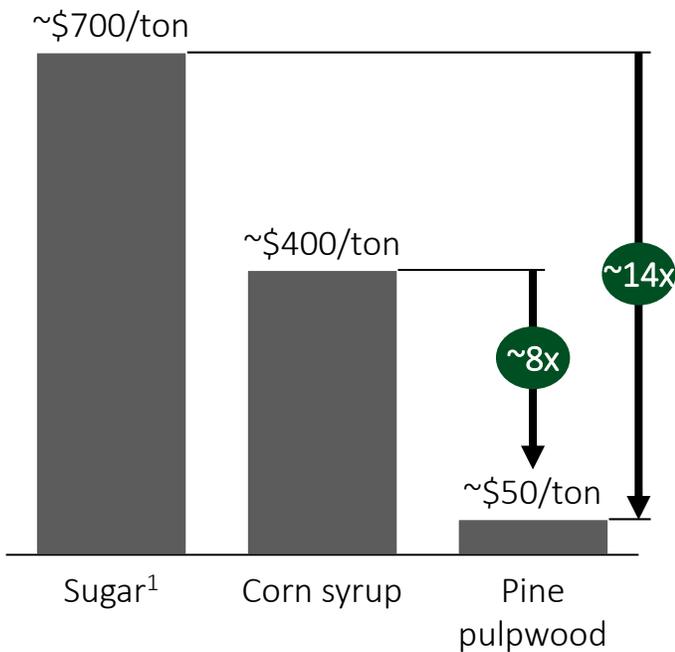


# Origin's use of timber and forest residues as feedstock is a potential game changer



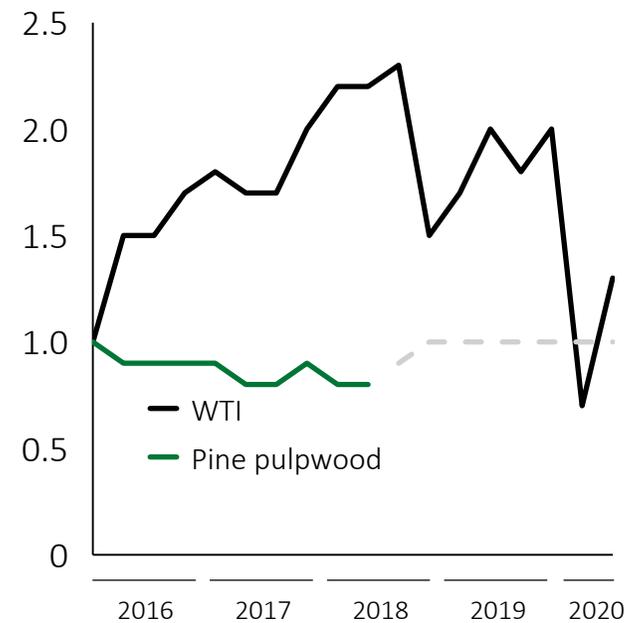
8x-14x cheaper than competing renewable feedstocks

## Feedstock price



Decoupled from supply volatility of the oil markets

## Indexed price (1 = Q1 2016 value)



Leverages waste, cleans forests, and lets food be food



Utilize waste



Improve forest management



Let food be food

1. Representative chemically relevant sugars such as glucose and high fructose corn syrup.  
Source: North Carolina State University; Economic Research Service, USDA; Macrotrends; and Origin Materials estimates.

# Origin has meaningful advantages over bioplastics companies

✓ Origin advantaged category vs. non-fossil competitors

	ORIGIN	Company A PHA	Company B PEF / FDCA	Company C PLA	Fossil
TAM \$ Bn	\$1,000	\$0.1 - \$0.5	\$250	\$1.5 - \$5.0	\$1,960
Carbon footprint <sup>1</sup> , indexed to fossil	<0	~0.7	0.3	0.3	1.0
Feedstock cost, \$/lb	\$0.03 Timber	\$0.36 Vegetable Oil	\$0.36 Fructose	\$0.15 Glucose	\$0.18 Oil
Process reliability	Chemical	Fermentation	Chemical	Fermentation	Chemical
Market maturity	Established	Nascent	Nascent	Nascent	Established
Recyclability	Strong existing infrastructure <sup>2</sup>	No existing infrastructure	Limited Infrastructure	Extremely limited infrastructure	Strong existing infrastructure
Degradability	Non-degradable PET; Industrial composting PEF <sup>3</sup>	Natural composting	Industrial composting <sup>3</sup>	Industrial composting	Non-degradable

**Origin...**

- Larger TAM
- Less expensive
- More sustainable
- Lower risk

1. For end product; carbon footprint based on publicly available feedstock footprint for analogous biofuels process (CORSA, REDII).

2. Refers only to PET.

3. Further study needed to determine if industrial composting reproduces results observed in degradation studies.

Source: Company websites, filings and press releases; Market and technical research reports; Origin Materials management team.

# Origin is supported by Global Fortune 500 companies

PackagingNews

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By Waqas Qureshi 10 September 2018

## PepsiCo joins Danone and Nestlé Waters in bio-based bottles R&D partnership

PepsiCo has joined the NaturALL Bottle Alliance, which is conducting an R&D partnership to develop 100% bio-based bottles.



We believe total estimated plastics demand from these three customers represents...

4.75Mn  
Tons

~20

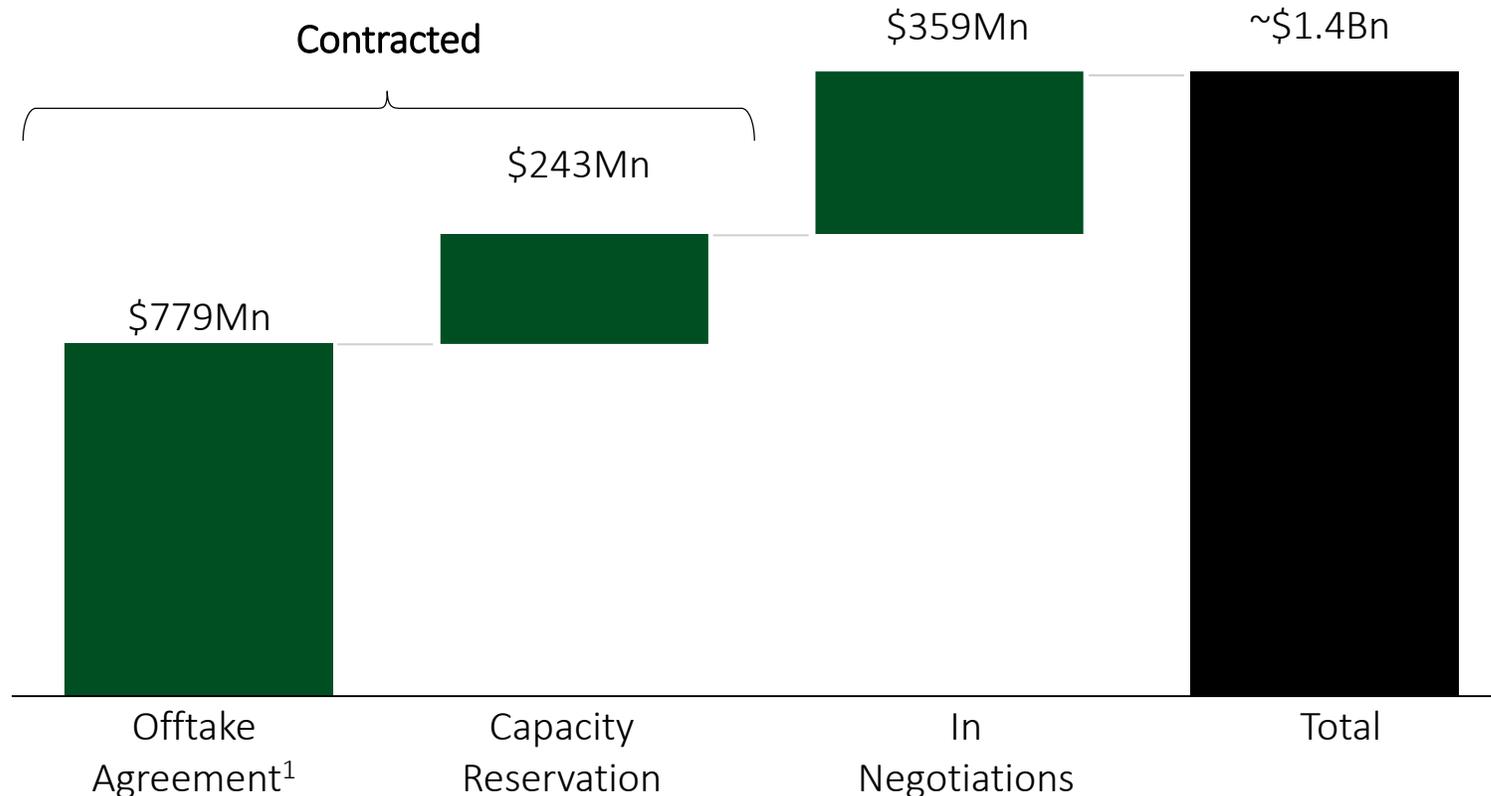
Commercial facilities required to meet PET demand<sup>1</sup>

1. Illustrative opportunity from fulfilling estimated PET portion of PepsiCo, Danone, and Nestlé Waters combined annual consumption of 4.75 million tons of plastics / year. Source: Company websites; Origin Materials management estimates.

# Origin has generated ~\$1.4Bn in customer demand

~\$1Bn in either offtake agreements or capacity reservations<sup>1</sup>

Customer demand, \$Mn cumulative



## Select Origin Customers



MITSUBISHI GAS CHEMICAL



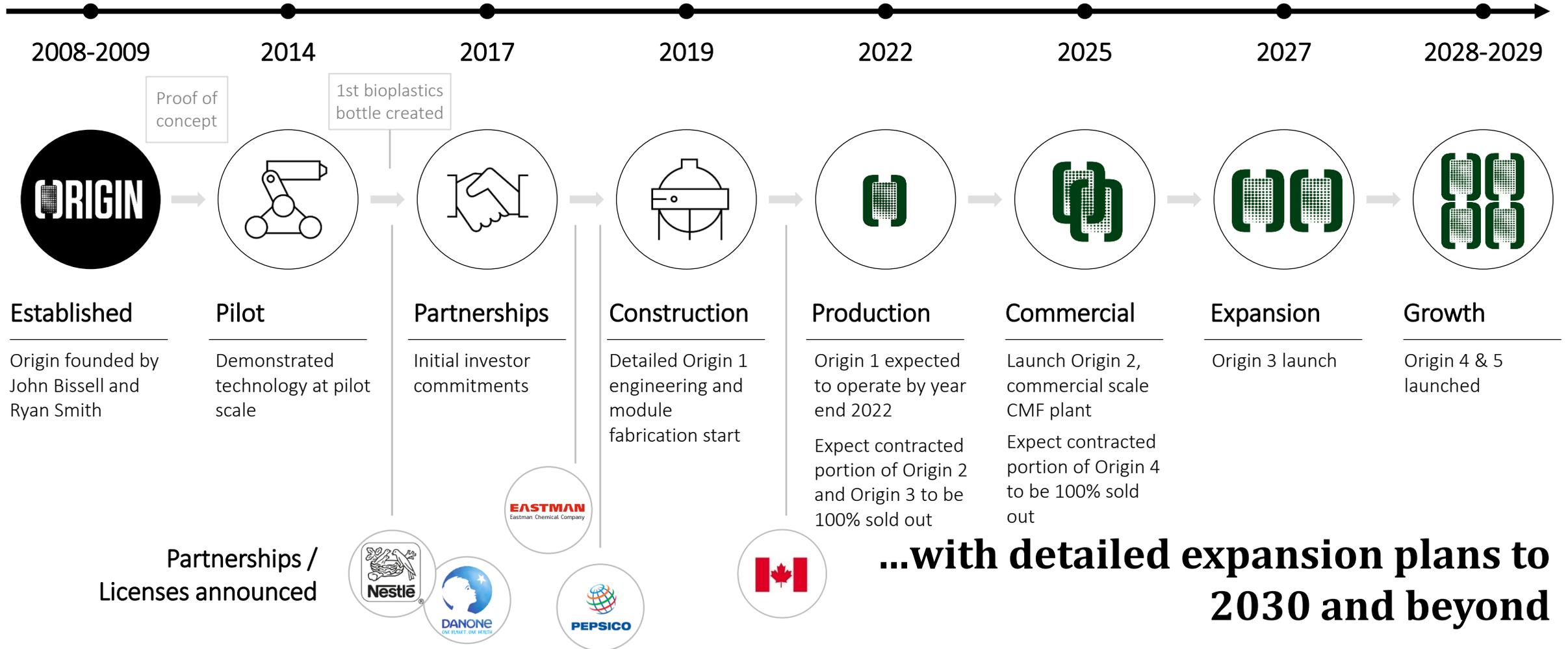
DANONE  
ONE PLANET. ONE HEALTH



PEPSICO

1. Includes \$264Mn specified as customer option. Figures assume maximum offtake amounts and exercise of full customer option.  
Source: Origin Materials.

# Origin is building on a strong foundation toward rapid growth...



# Origin 1 (Sarnia, Ontario, Canada)

- Construction site in Sarnia, Ontario (Canada)
- Origin 1 construction is advanced and is expected to be operating by year end 2022
- 17 large, complex equipment modules were fabricated by Koch Modular Process Systems (along with other equipment) and are now sitting onsite awaiting installation
- Construction progress includes installing most building foundations, foundations for main process areas, underground services, as well as trailers, fencing, and communications for the site



# Origin 1 (Sarnia, Ontario, Canada)

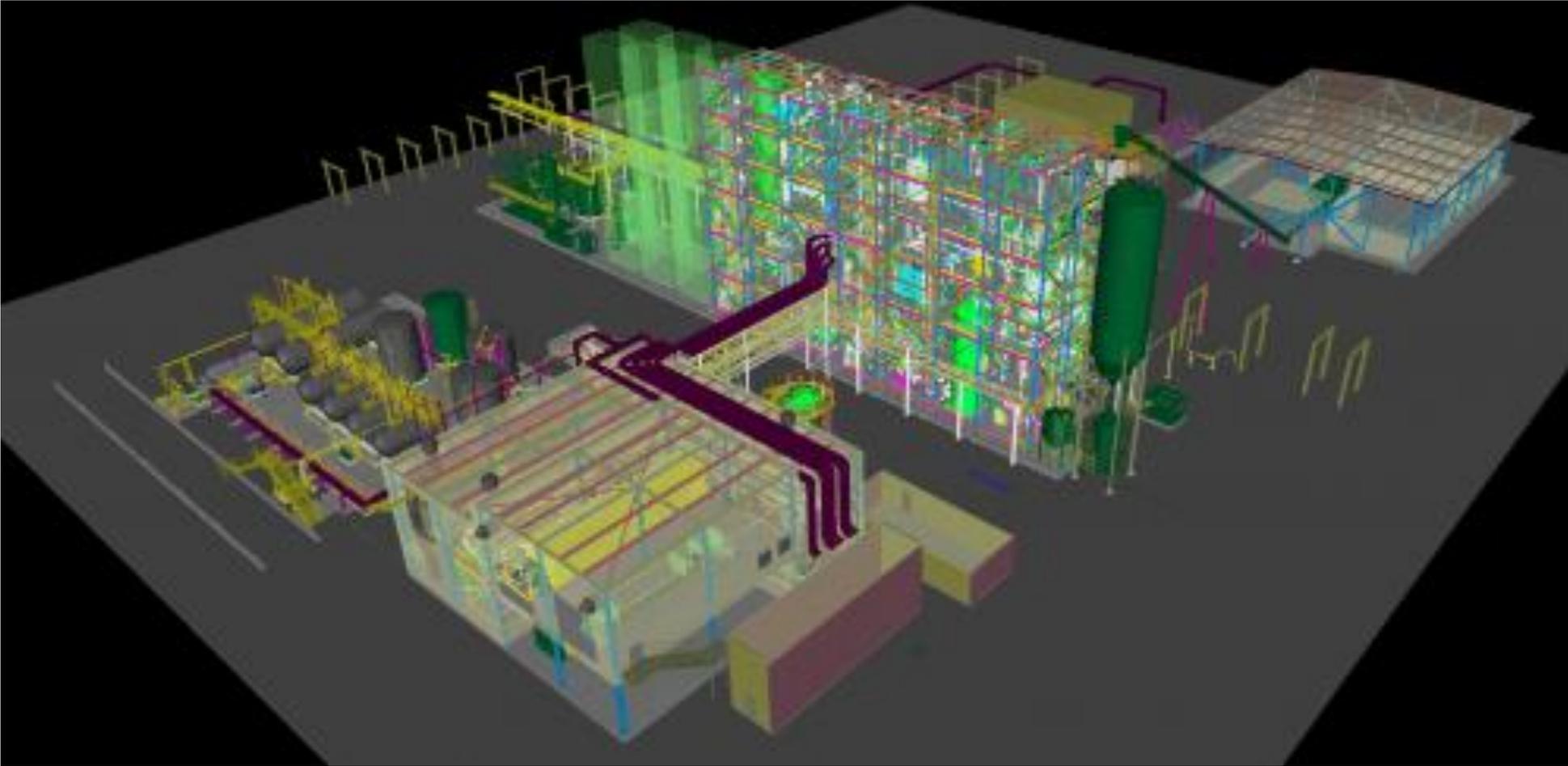


Tanks in construction yard

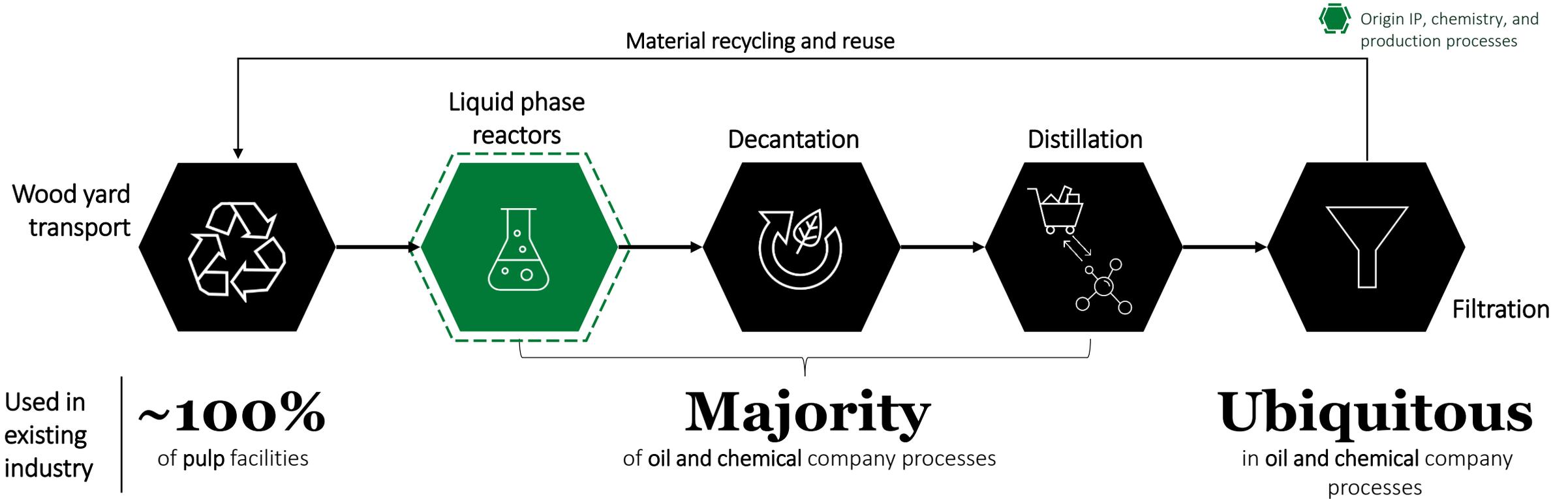


Core process modules awaiting installation

# 3D diagram of the Origin 1 Plant Site in Sarnia, Ontario



# Origin is delivering transformational chemistry through mature, industry-standard equipment, materials, and technical processes



**19**

Patent families protect unique CMF and HTC production processes

**Zero**

untested mechanical processes required for operations / scale-up<sup>1</sup>

1. Unit operations have been used extensively in industry.  
Source: Origin Materials.

# Origin is pursuing a capital efficient strategy to optimize CAPEX

Origin is keenly aware that **capital efficiency** will be the major driver of its **long term profitability**.

For this reason, Origin is pursuing a pulp mill **“brownfield” CAPEX strategy** to **save ~\$100Mn** on its total commercial plant CAPEX



Wood chip waste streams



Pulp mill scale

## Origin’s strategy:

**#1**

Identify & purchase mill

Work with partners to identify suitable aging / defunct pulp mill

**>40**

*Potential brownfield sites (e.g., closed pulp mills) in the US & Canada built in the last 50 years*

**#2**

Convert equipment

Leverage key components needed for its wood handling process (e.g., utilities, boiler, wood yard)

**>\$100Mn**

*Total useable value of converted equipment, even after considering expected upgrade costs*

**#3**

Integrate & operate

Integrate refurbished components into the rest of its necessary equipment / plant infrastructure

**Up to 15%**

*Net savings on total plant CAPEX, or ~\$100Mn co-location benefit*

Pulp mill “brownfield” strategy offers additional benefits, including the existing forest supply chain ecosystem and local gov’t incentives

# Origin brings an unrivaled set of industry veterans, leaders, and visionaries



**John Bissell**  
Co-Founder  
& Co-CEO

- Founded Origin Materials in 2008
- Featured on Forbes 30 under 30



**Rich Riley**  
Co-CEO

- Former CEO Shazam and senior executive at Yahoo!
- 20+ years managing rapid-growth organizations



**Nate Whaley**  
CFO

- 20 years C-Suite experience scaling complex high growth business across industries



**Stephen Galowitz**  
CCO

- Co-founder / Chief Development Officer of Renewables company
- 15 years experience in Renewables space



**Ryan Smith**  
Co-Founder & CTO

- Founded Origin Materials in 2008
- Process Engineer at NEC Electronics



**Mako Masuno, PhD**  
VP of R&D

- Pathway Development & Optimization Expert
- Organic Chemistry Professor



**Roman Wolff**  
VP of Engineering

- Engineering leader at TETRA Technologies
- 30 years of experience in engineering on more than 20 projects



**Josh Lee**  
General Counsel

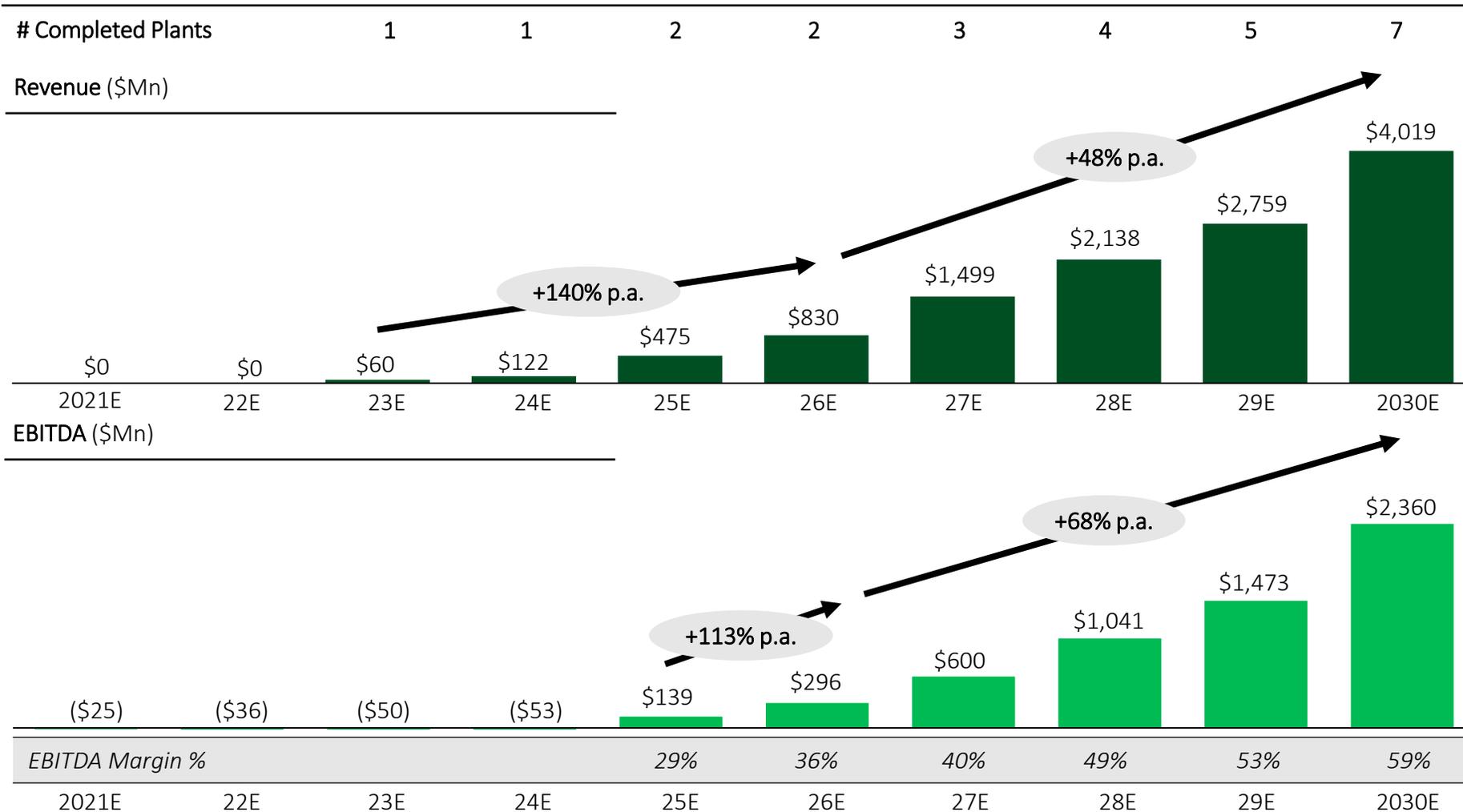
- Attorney at Irell & Manella, LLP
- Sr. Analyst at Strumwasser & Woocher, LLP





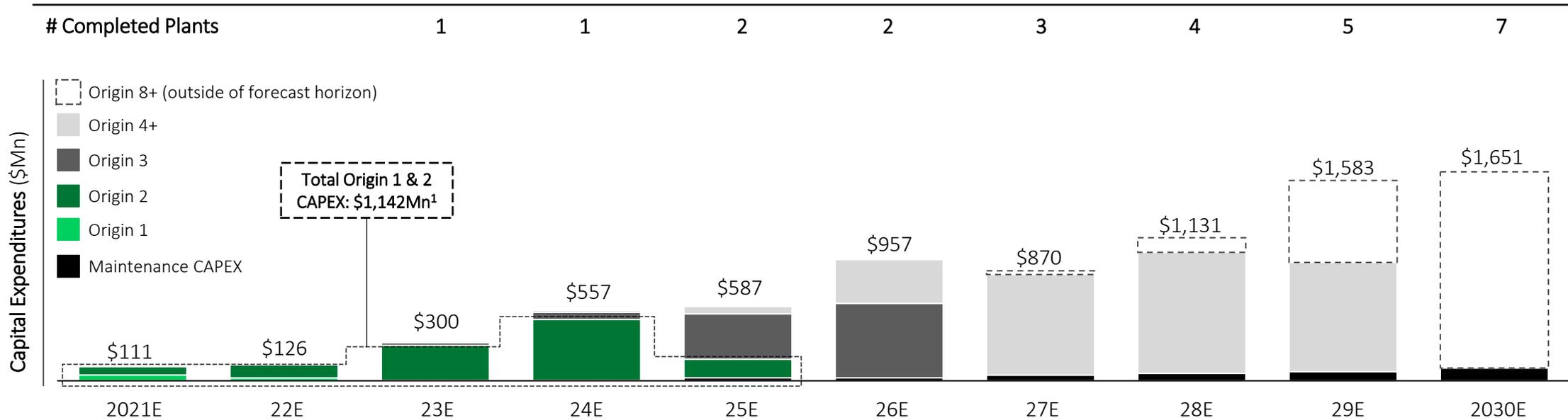
## 2. Financial Overview

# Origin expects to deliver a superior financial profile for years to come



- Revenue and materials volume forecast / growth based on satisfying existing customer off-take contracts and expected future demand
- Pricing assumptions are based on negotiated contract pricing with existing customers
- Feedstock cost assumptions reflect historically low volatility of pine pulpwood prices
- Cost assumptions also include additional required overhead during scaling
- EBITDA margins and associated growth improve throughout the forecast period as a result of increasing economies of scale from additional plants coming online
- Includes R&D expenditures to maintain Origin as the global leader in low or negative carbon material technologies

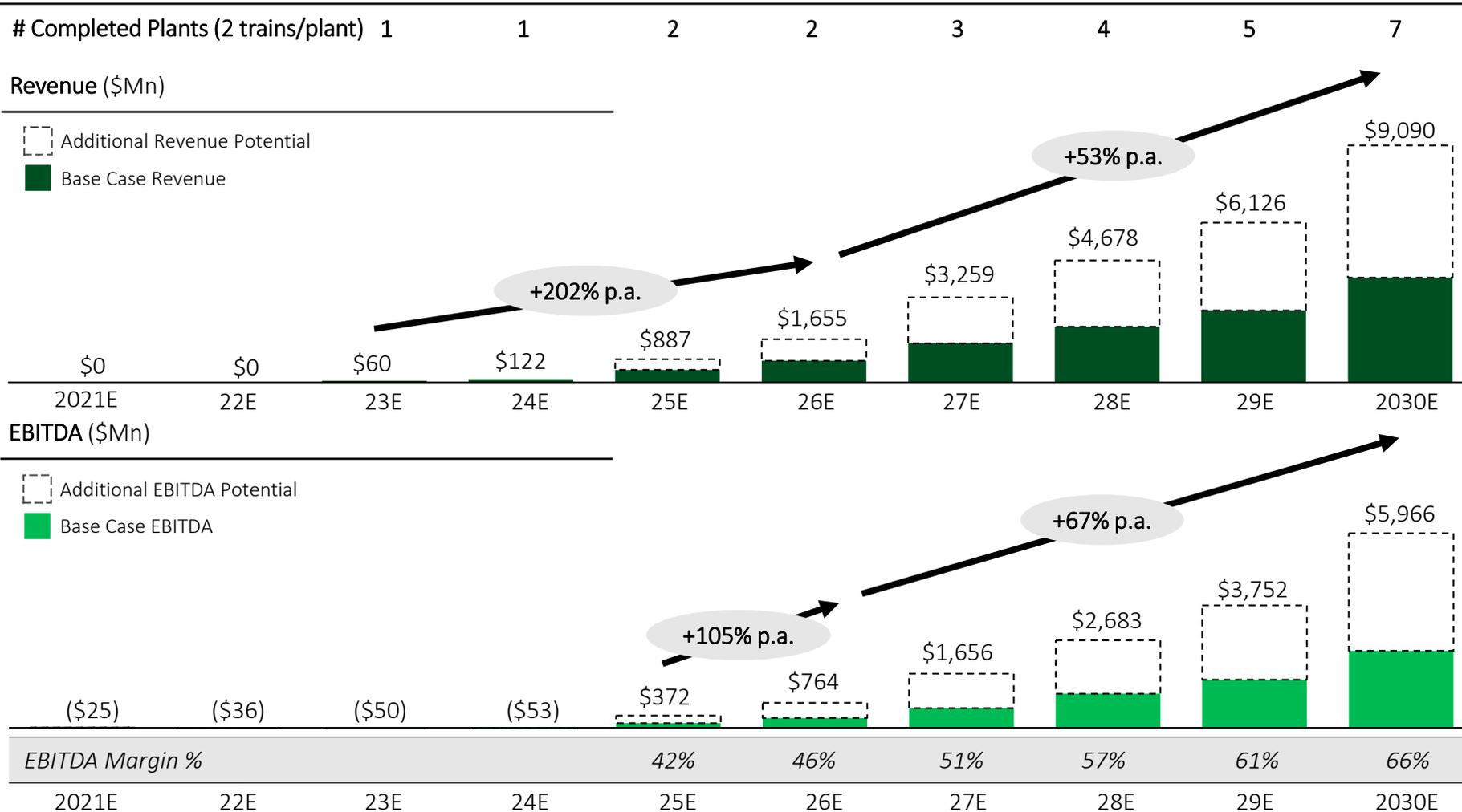
# Anticipated fully funded growth plan to profitability



- Current transaction is expected to be sufficient to fully finance the construction of Origin 1 and Origin 2 and achieve EBITDA profitability
- CapEx based on estimates from world-leading EPC companies that Origin will partner with to deliver holistic capital project solutions
- Capacity scaling based on current customer contract commitments / orders and anticipation of demand from global industrial complex rushing to secure “drop in” decarbonized materials to meet their carbon commitments

1. Cash in trust and funds from PIPE transaction represent 81% of Origin 1 and 2 CAPEX. Assumes no shareholder redemptions. Source: Origin Materials management estimates.

# Origin could see significant additional revenue potential



- Assumes Origin is able to secure moderately higher prices in new customer contracts as a result of strong demand and carbon negative materials scarcity
- Concurrently, assumes Origin adds capacity at a faster rate than base business plan<sup>1</sup>, adding two trains per new plant, effectively doubling capacity of each
- Feedstock prices assumed unchanged as primary feedstock supply (forest / wood processing residues) is ample and well above Origin's needs

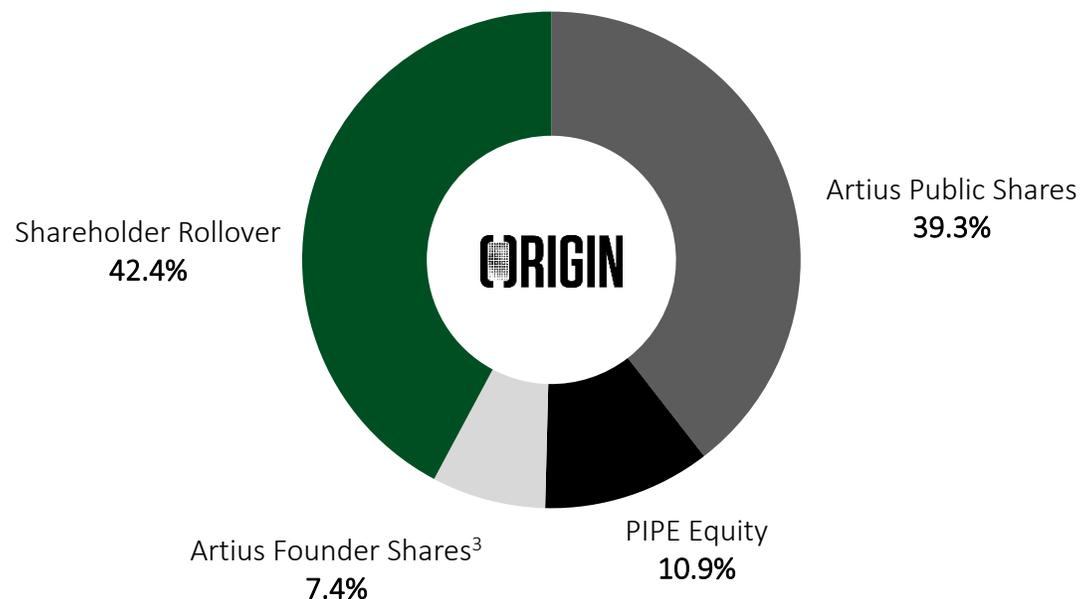
1. Subject to capital availability.  
Source: Origin Materials management estimates.

# Detailed transaction overview

## Key Transaction Terms

- The transaction is subject to there being a minimum cash amount of \$525Mn in Artius at closing after giving effect to any shareholder redemptions
- Executed subscription agreements for committed capital in connection with PIPE for \$200Mn before transaction announcement
- Earnout of 29.5Mn shares vesting equally based on share price thresholds of \$15, \$20 and \$25 per share within 3, 4 and 5 years, respectively<sup>1</sup>

## Pro Forma Ownership @ \$10.00 Per Share<sup>2</sup>



## Pro Forma Valuation (\$Mn)

Origin Materials Share Price	\$10.00
<i>Shares Outstanding (Mn)</i>	184.3
<b>Equity Value</b>	<b>\$1,843</b>
<i>Existing Net Debt</i>	20 <sup>4</sup>
<i>(-) Net Cash to Balance Sheet</i>	(863)
<b>Enterprise Value</b>	<b>\$999</b>

## Illustrative Sources and Uses (\$Mn)

Sources	
Shareholder Rollover	\$782
Artius Cash in Trust	\$725
Additional PIPE Equity	\$200
<b>Total Sources</b>	<b>\$1,707</b>
Uses	
Shareholder Rollover	\$782
Cash to Balance Sheet	\$863
Estimated Fees and Expenses	\$62
<b>Total Uses</b>	<b>\$1,707</b>

1. Consists of 25.0Mn shares to Origin Shareholders and 4.5Mn shares to Artius upon release from forfeiture provisions upon achievement of earnout thresholds.

2. Assumes no redemption of public shares, no earnout shares issued and a PIPE of \$200Mn. Consists of 78.213Mn Shareholder Rollover Shares, 13.613Mn Artius Founder Shares, 20.000Mn PIPE Equity Shares and 72.450Mn Artius Public Shares. Pro forma ownership does not reflect any adjustment for Origin net debt at closing being more than \$15.3Mn.

3. Includes the deferral of a portion of the Founder Shares subject to same conditions as Earnout consideration to be provided to Origin's existing shareholders. 4. Net debt consists of \$21Mn of Debt and \$1Mn of Cash.

# Illustrative valuation references

		Specialty Chemicals	Biochemicals / Biomaterials	Disruptive technology
Key Metrics		   	    	    
Sustained growth outlook				
ESG	High	Low / Medium	Medium / High	High
Tech component	High	Medium	Medium / High	High
Secured revenue	High	Medium	Medium / High	Medium / High
<b>Operational</b>				
CY'20E-22E revenue CAGR	161% <sup>(1)</sup>	7%	19%	45% <sup>(4)</sup>
CY'21E EBITDA margin	36% <sup>(2)</sup>	28%	21%	22% <sup>(4)</sup>
<b>Valuation</b>				
EV / CY'21E sales / EV / CY'22E sales	1.2x / 0.7x	5.7x / 5.4x	13.4x / 9.8x	17.0x / 12.8x <sup>(5)</sup>
EV / CY'21E EBITDA / EV / CY'22E EBITDA	3.4x / 1.7x	20.6x / 18.7x	30.3x / 21.6x <sup>(3)</sup>	109.7x / 65.4x <sup>(5)</sup>
	<b>Represents 2026E / 2027E multiples</b>			

Source: Origin Materials Consolidated Financials; company projections based on company filings and FactSet as of January 29, 2021.

Note: Company statistics represent mean statistics.

1. CY'24 – CY'26E

2. CY'26E.

3. Danimer EV / EBITDA multiples based on 2023E / 2024E from October 2020 Investor Presentation.

4. Plug Power and Desktop Metal CAGR based on 2023E-2025E, margins based on 2024E.

5. Plug Power and Desktop Metal multiples based on 2024E / 2025E.

# Origin has significant upside potential

## Approach

- Applies a range of 20.0x – 30.0x multiples to Origin Materials 2026E EBITDA of \$296 million to arrive at an implied future enterprise value
- The future enterprise value is discounted 5 years back to 2021 at a 20% discount rate to arrive at an implied discounted enterprise value

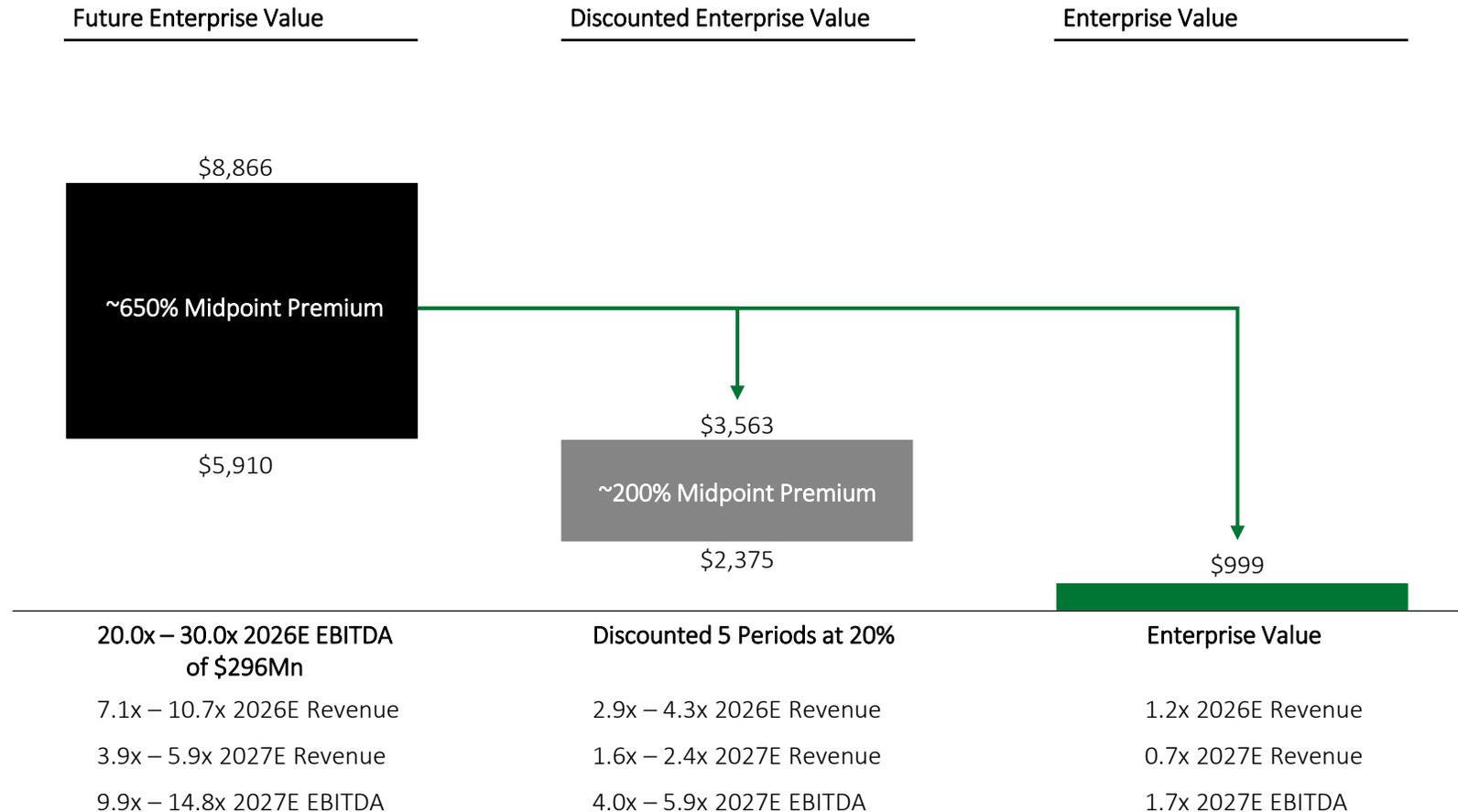
## Implied Discounted EV Sensitivity

		EBITDA Multiples				
		20.0x	22.5x	25.0x	27.5x	30.0x
Discount Rate	15.0%	\$2,939	\$3,306	\$3,673	\$4,040	\$4,408
	20.0%	2,375	2,672	2,969	3,266	3,563
	25.0%	1,937	2,179	2,421	2,663	2,905

## Transaction Multiples

Metric (\$Mn)	
2026E Revenue	\$830
2027E Revenue	\$1,499
2027E EBITDA	\$600

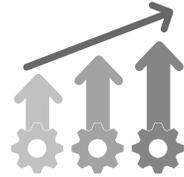
## Implied EV based on comparable companies current trading valuations (\$Mn)



# Origin as a public company

We will continue to build upon our customer momentum while managing operations

Origin's business combination is estimated to support planned operations until EBITDA positive...



*Scale the organization's capabilities*



*Complete construction and begin operations of Origin 1*



*Engineer and design full commercial scale production facilities*



*Fund Origin 2 site acquisition, equipment, and construction*



*Support research & development for new products (e.g., Origin Ag)*



Meanwhile, Origin plans to demonstrate momentum on a quarterly basis...



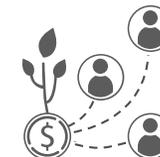
*Secure fully committed Origin 2 and 3 production volumes*



*Execute EPC alliance agreement and secure joint venture production*



*Share updates on construction progress and major milestones*



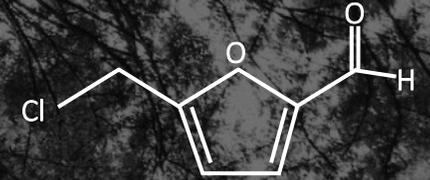
*Engage with stakeholders and industry at large (e.g., conferences)*



*Develop new products and applications to build on market opportunity*

# Origin Materials – At a Glance

The world's leading carbon negative materials company



## Disruptive Materials Technology Company



Origin produces low and negative carbon materials

## Decarbonizing Platform Technology



Enables customers' net-zero commitments

## Enormous TAM

~\$1+ Trillion

\$390Bn near-term focus in polyesters; \$750Bn across broad range of materials

## Cost advantaged



Timber feedstocks are competitive with oil and ~10x cheaper than bio alternatives

## Global Fortune 500 Customers & Investors

11% Owned by customers who are also investors<sup>1</sup>



## Massive Customer Demand<sup>2</sup>

\$1.4Bn and growing

from a diverse mix of industries

## Protected & Validated Technology

19 Patent Families

Core technology protected in key countries; validated by customers and 3<sup>rd</sup> party experts

## Funded to Commercial Scale<sup>3</sup>

\$863Mn

Origin expected to be fully financed until EBITDA positive

1. Represents combined ownership by PepsiCo, Danone and Nestle prior to this transaction.

2. Includes \$264Mn specified as customer options and \$359Mn in negotiations with potential customers. Figures assume maximum offtake amounts and exercise of full customer options. Refer to slide 23 for additional detail.

3. Refer to slides 35 and 43 for additional detail. Assumes no Artius share redemption.

Source: Origin Materials.



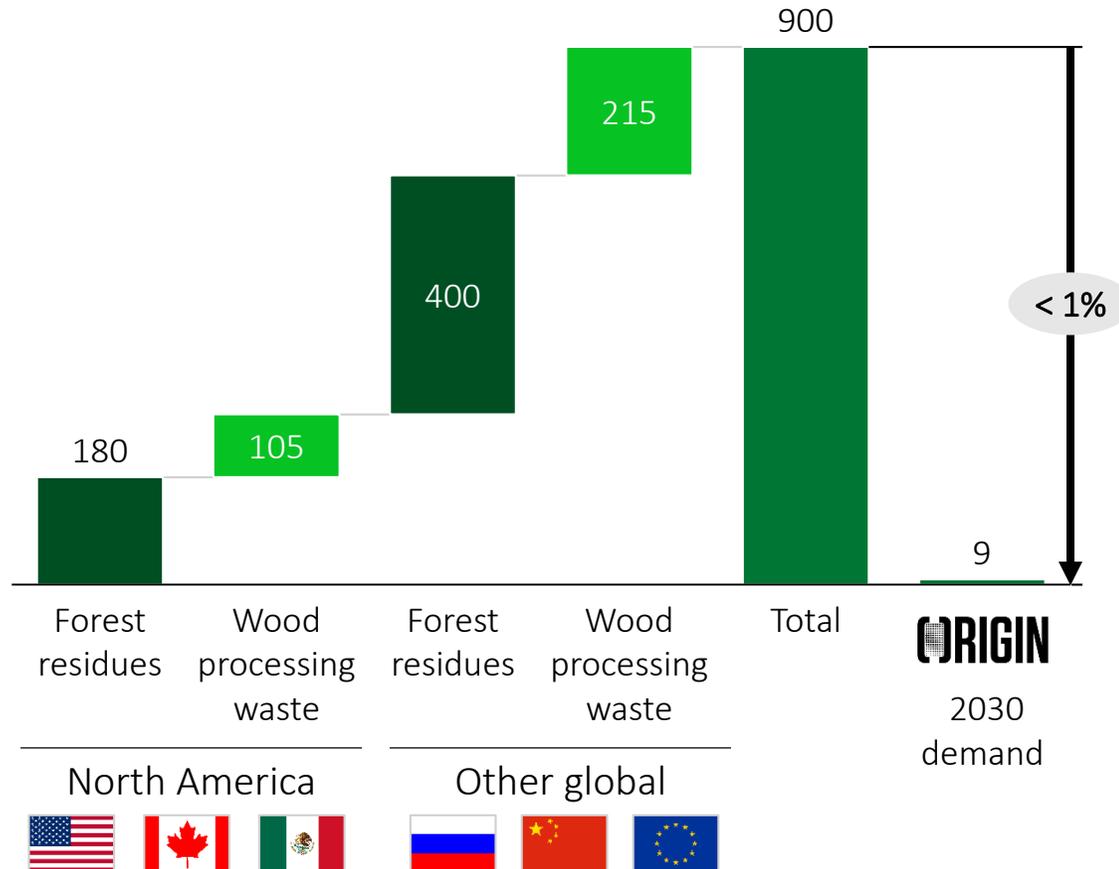
**ORIGIN**

**Appendix**

# Origin is not feedstock limited

## Primary feedstock (forest / wood processing residues)

Million tons annual availability



## Additional feedstock optionality



**> 2X** Additional feedstock supply available above forest / wood processing residues alone

# Origin will look to value chain participants to complement its strengths

 Origin's strengths



“Our proprietary bread and butter”

- Proprietary technology in a league of its own

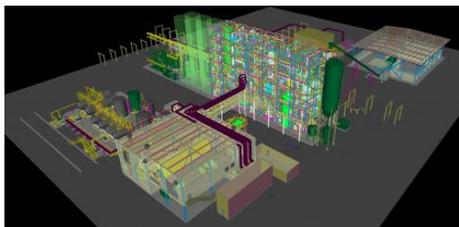
“Putting it all together”

- We will leverage an already-existing industrial base of monomer, polymer, additive, and packaging / extrusion technology
  - Beyond Origin 2 (monomers), we will license or sell that technology to a value chain participant

“Clear market pull”

- Years of experience working with the end consumer to address sustainability goals

Picture: Origin 1



Illustrative potential value chain participants<sup>1</sup>:



Origin is in discussions with multiple partners and is ready to scale its strategy through its next phase of growth

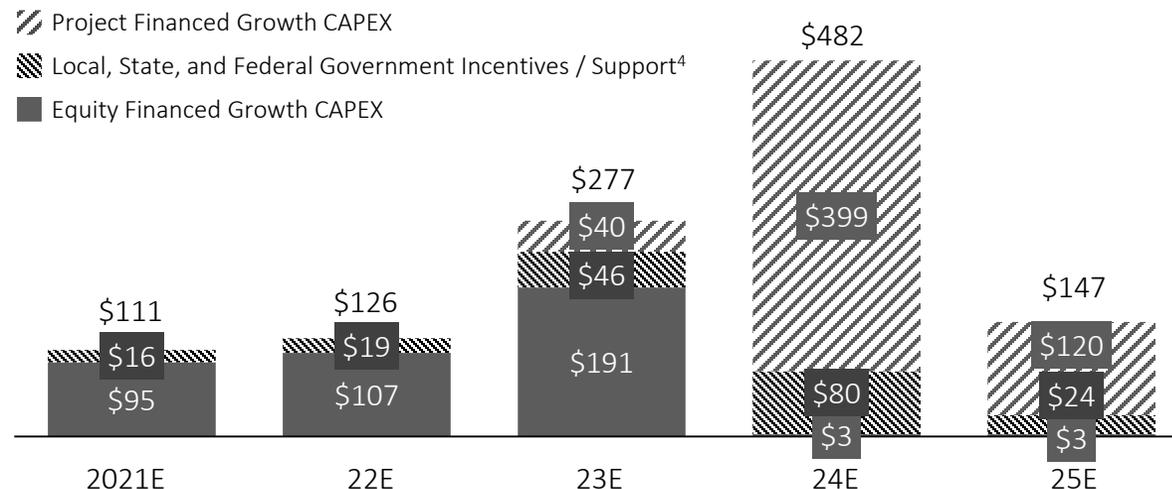
1. Origin Materials may or may not be in discussions with these parties.  
Source: Origin Materials.

# Anticipated to be fully funded to EBITDA profitability

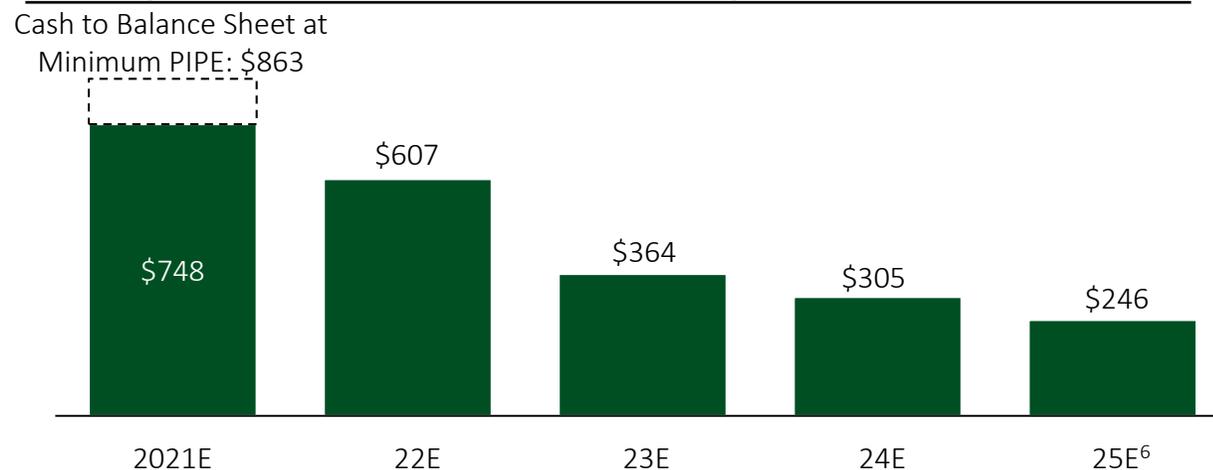
## Cash Flow Sources & Uses from 2021E to Origin 2 Revenue in 2025E

Gross Proceeds	\$925
Less: Transaction fees and expenses	(62)
<b>Net Proceeds<sup>1</sup></b>	<b>\$863</b>
Add: Project Financing	\$558
Add: Local, State, and Federal Government Incentives / Support	185
Less: Origin 1 Growth CAPEX	(70)
Less: Origin 2 Growth CAPEX	(1,072)
Less: Cash Flow from Operations '21 – '25 <sup>2</sup>	(218)
<b>Remaining Cash to Fund Origin 3 and Beyond</b>	<b>\$246</b>

## Origin 1 and Origin 2 Growth CAPEX Schedule<sup>3</sup> (\$Mn)

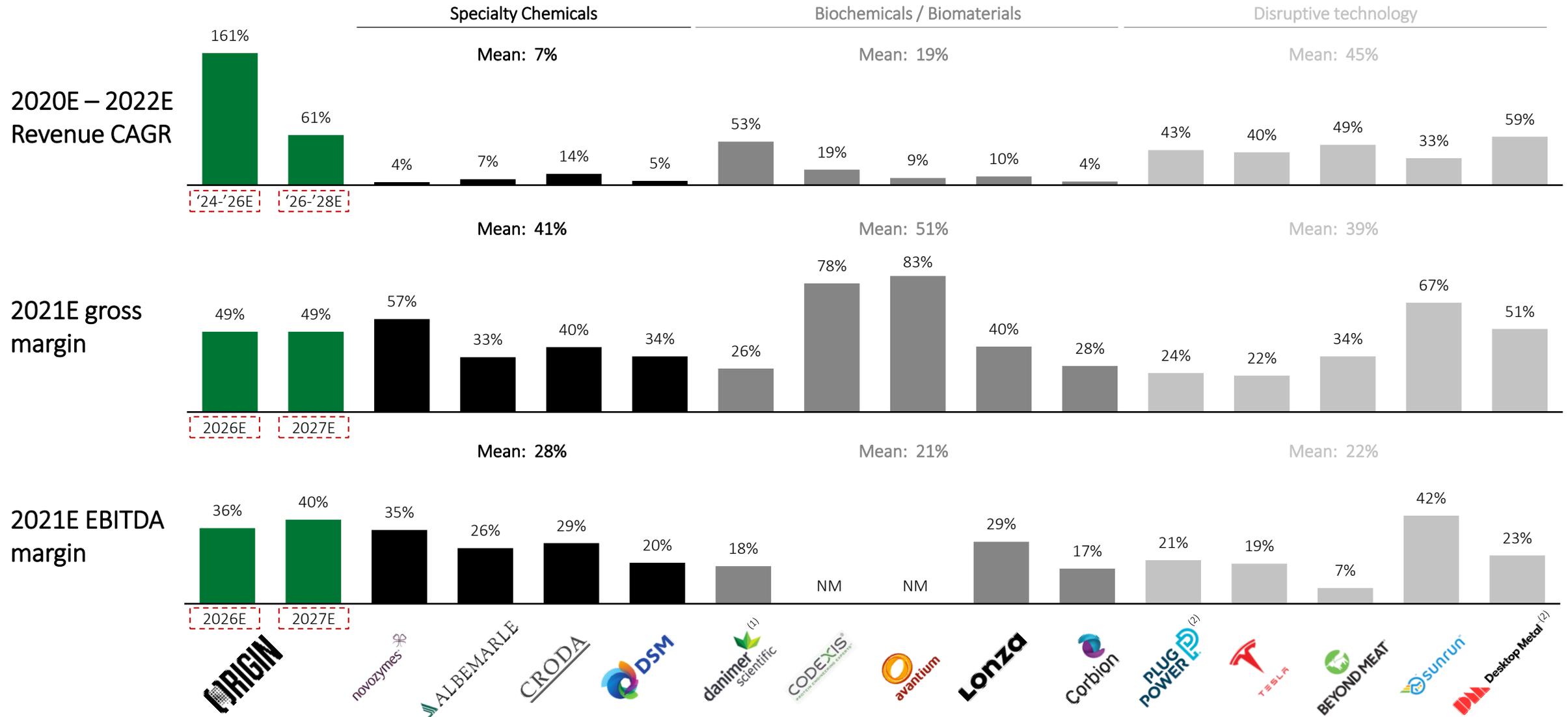


## Remaining Cash Balance from Current Transaction to Origin 2 Revenue<sup>5</sup> (\$Mn)



1. Refer to slide 35 for additional detail. Assumes no share redemptions and none of the Artius warrants to acquire 35.5Mn shares are exercised. 2. Cash flow from operations calculated as EBITDA + Working Capital + Maintenance CAPEX from 2021 until reaching Origin 2 revenue in 2025. 3. Project financing and government incentives / support have not yet been secured. 4. Represents anticipated local, state and federal government incentives / support. 5. Defined as net proceeds less annual cash flow from operations less equity financed growth CAPEX for Origin 1 and 2. Excludes \$1Mn existing cash. 6. Prior to Origin 2 operations date in 2025E. Source: Origin Materials management estimates.

# Illustrative valuation references – operational benchmarking



Source: Origin Materials Consolidated Financials; company projections based on company filings and FactSet as of January 29, 2021.

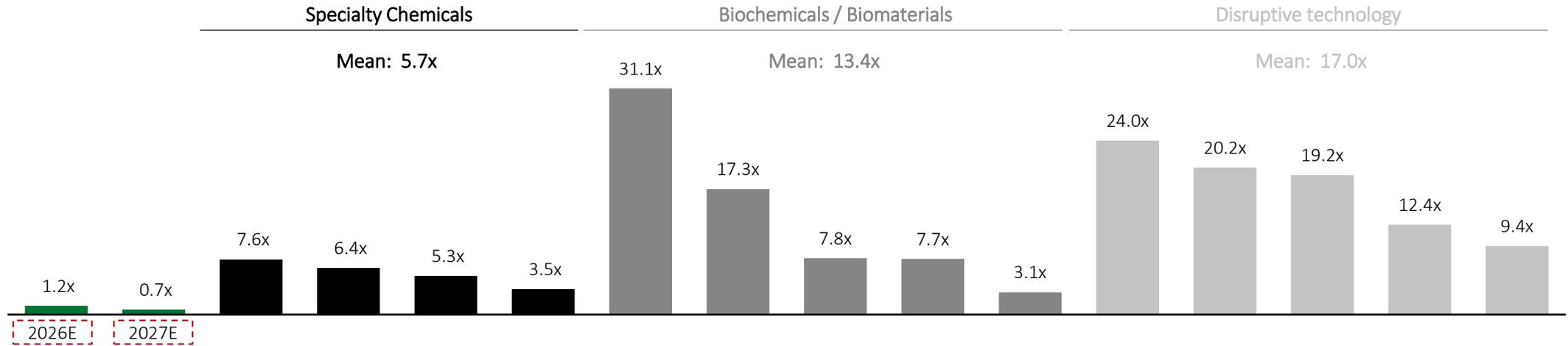
Note: Companies are ordered in descending 2021E EV / Revenue.

1. Danimer revenue CAGR based on 2021E – 2023E.

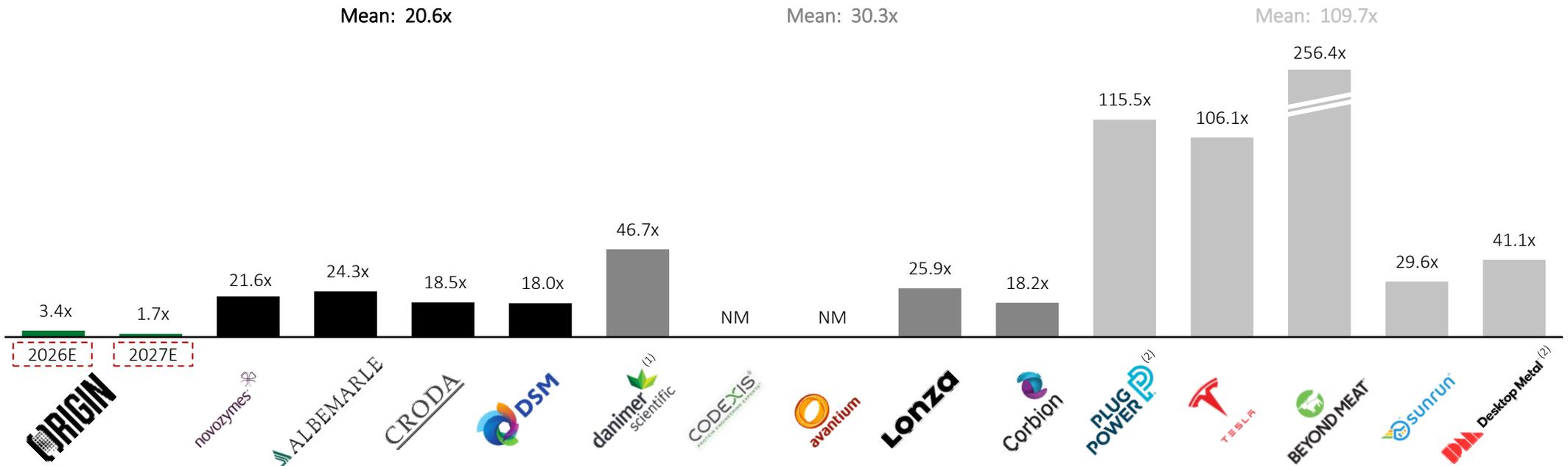
2. Plug Power and Desktop Metal CAGR based on 2023E-2025E, margins based on 2024E.

# Illustrative valuation references – valuation benchmarking

2021E EV / Revenue



2021E EV / EBITDA



Source: Origin Materials Consolidated Financials; company projections based on company filings and FactSet as of January 29, 2021.

Note: Companies are ordered in descending 2021E EV / Revenue.

1. Danimer metrics based on 2023E EBITDA.

2. Plug Power and Desktop Metal multiples based on 2024E / 2025E.

# Glossary

## Abbreviation

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## Explanation

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Carbon negative

Carbon negative activities or products go beyond achieving reduced carbon impact, or net zero carbon impact, to actually remove additional carbon dioxide from the atmosphere

CMF

5-Chloromethylfurfural, organic compound obtained from dehydration derivatives

FDCA

2,5-Furandicarboxylic Acid, organic compound that is a renewable resource because it can be produced from carbohydrates

HTC

Hydrothermal Carbon, structured compounds that have been converted from organic compounds

PET

Polyethylene Terephthalate, most common thermoplastic polyester used for packaging foods and beverages

PEF

Polyethylene Furanoate, bio-based thermoplastic polyester also primarily used for packaging

pX

Paraxylene, an important chemical feedstock used in the large scale synthesis of various polymers



# ORIGIN

*We make negative carbon materials matter*