



Company Overview

The world's leading carbon negative materials company

August 24, 2021

Forward looking statements and disclaimers

FORWARD-LOOKING STATEMENTS

This presentation and the accompanying oral presentation have been prepared by Origin Materials, Inc. (“Origin”) for informational purposes only and not for any other purpose. Certain statements included in this presentation that are not historical facts are forward-looking statements for purposes of the safe harbor provisions under the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements generally are accompanied by words such as “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “should,” “would,” “plan,” “predict,” “potential,” “seem,” “seek,” “future,” “outlook,” and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding Origin’s business strategy, estimated total addressable market, commercial and operating plans, product development plans, anticipated growth and projected financial information. These statements are based on various assumptions, whether or not identified in this presentation, and on the current plans, objectives, estimates, expectations and intentions of the management of Origin and are not predictions of actual performance and inherently involve significant risks and uncertainties. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on as, a guarantee, an assurance, a prediction, or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond the control of Origin. These forward-looking statements are subject to a number of risks and uncertainties, including that Origin may be unable to successfully commercialize its products; the effects of competition on Origin’s business; the uncertainty of the projected financial information with respect to Origin; disruptions and other impacts to Origin’s business as a result of the COVID-19 pandemic and other global health or economic crises; changes in customer demand; and those factors discussed in the prospectus filed by Origin with the SEC on July 30, 2021 under the heading “Risk Factors,” and other documents Origin has filed, or will file, with the SEC, including Origin’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2021. These filings, when available, are available on the investor relations section of our website at investors.boltbio.com and on the SEC’s website at www.sec.gov. If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks of which Origin does not presently know, or that Origin currently believes are immaterial, that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect Origin’s expectations, plans, or forecasts of future events and views as of the date of this presentation. Origin anticipates that subsequent events and developments will cause its assessments to change. However, while Origin may elect to update these forward-looking statements at some point in the future, Origin specifically disclaims any obligation to do so except as required under applicable law. These forward-looking statements should not be relied upon as representing Origin’s assessments of any date subsequent to the date of this presentation. Accordingly, undue reliance should not be placed upon the forward-looking statements.

USE OF PROJECTIONS

This presentation contains Origin’s projected financial information. Such projected financial information is forward-looking and is for illustrative purposes only. It should not be relied upon as being indicative of future results. The assumptions and estimates underlying such projected financial information are inherently uncertain and are subject to many significant business, economic, competitive and other risks and uncertainties. Refer to “Forward-Looking Statements” above. Actual results may differ materially from the results presented in such projected financial information, and the inclusion of such information in this presentation should not be regarded as a representation by any person that the results reflected in such projections will be achieved.

FINANCIAL INFORMATION; NON-GAAP FINANCIAL MEASURES

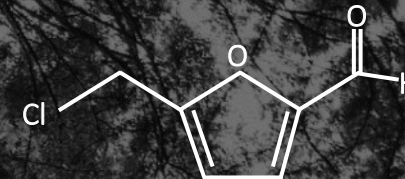
The financial information and data contained in this presentation are unaudited and do not conform to Regulation S-X. Accordingly, such information and data may not be included, may be adjusted or may be presented differently in any document to be filed or furnished by Origin with the SEC. In addition to financial measures included in this presentation that are calculated in accordance with generally accepted accounting principles in the United States (“GAAP”), this presentation contains non-GAAP financial measures. Origin believes these non-GAAP financial measures provide useful information to management and investors regarding certain financial and business trends relating to Origin’s financial condition and results of operations. Origin does not place undue reliance on these non-GAAP financial measures, and they should not be considered as substitutes for other measures of financial condition and results of operations reported in accordance with GAAP.

TRADEMARKS

This presentation contains trademarks, service marks, trade names and copyrights of Origin and other companies which are the property of their respective owners.

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 & Investors¹



Strong Customer Demand²

\$3.5Bn and growing

from a diverse mix of industries

Protected & Validated Technology

19 Patent Families

Core technology protected in key countries

Cash on hand³

\$471 Mn

Origin expected to be fully financed until EBITDA positive with anticipated financing and grants

1. Denotes ownership by PepsiCo, Danone and Nestle prior to business combination with Artius Acquisition, Inc.

2. Includes \$264Mn specified as customer options. Figures assume maximum offtake amounts and exercise of full customer options. Refer to slide 20 for additional detail.

3. As of June 30, 2021. Refer to slide 37 for additional detail.

Source: Origin Materials.


As previously reported on Origin's Form 8-K filed on August 12, 2021.

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**
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

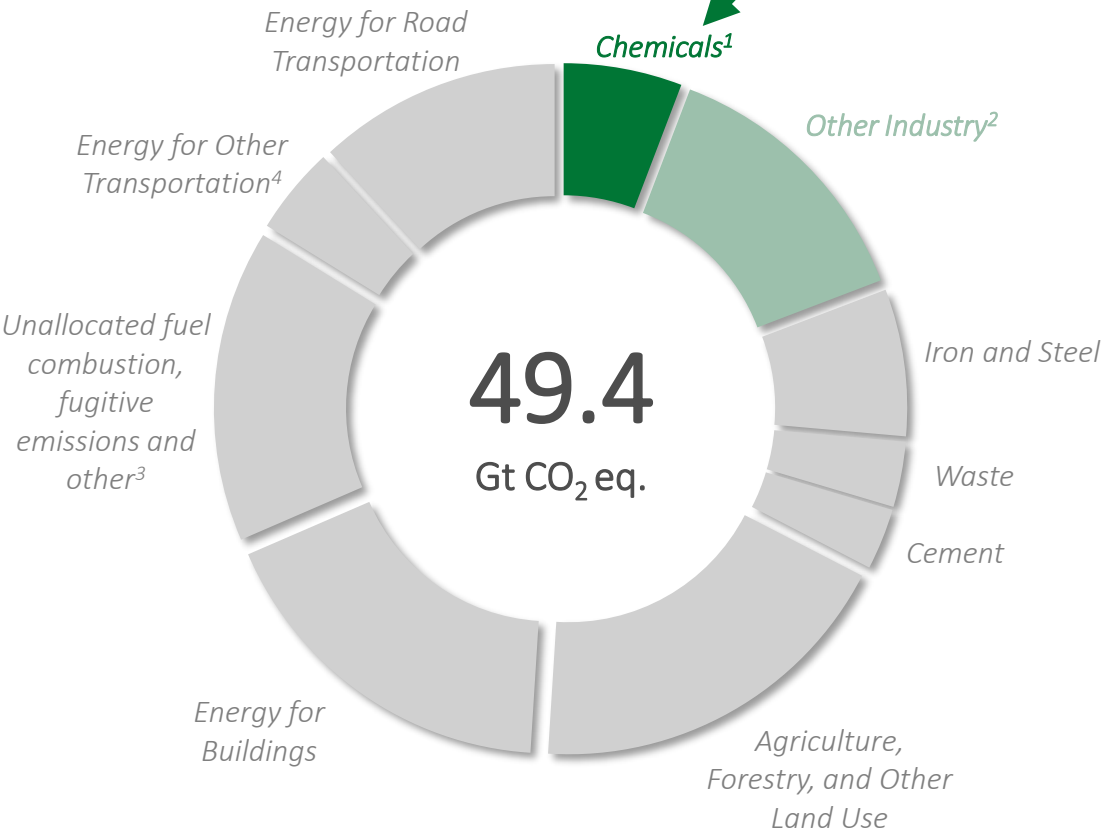
 **Nike**
Net zero by 2050

 **Shell**
Net zero by 2050

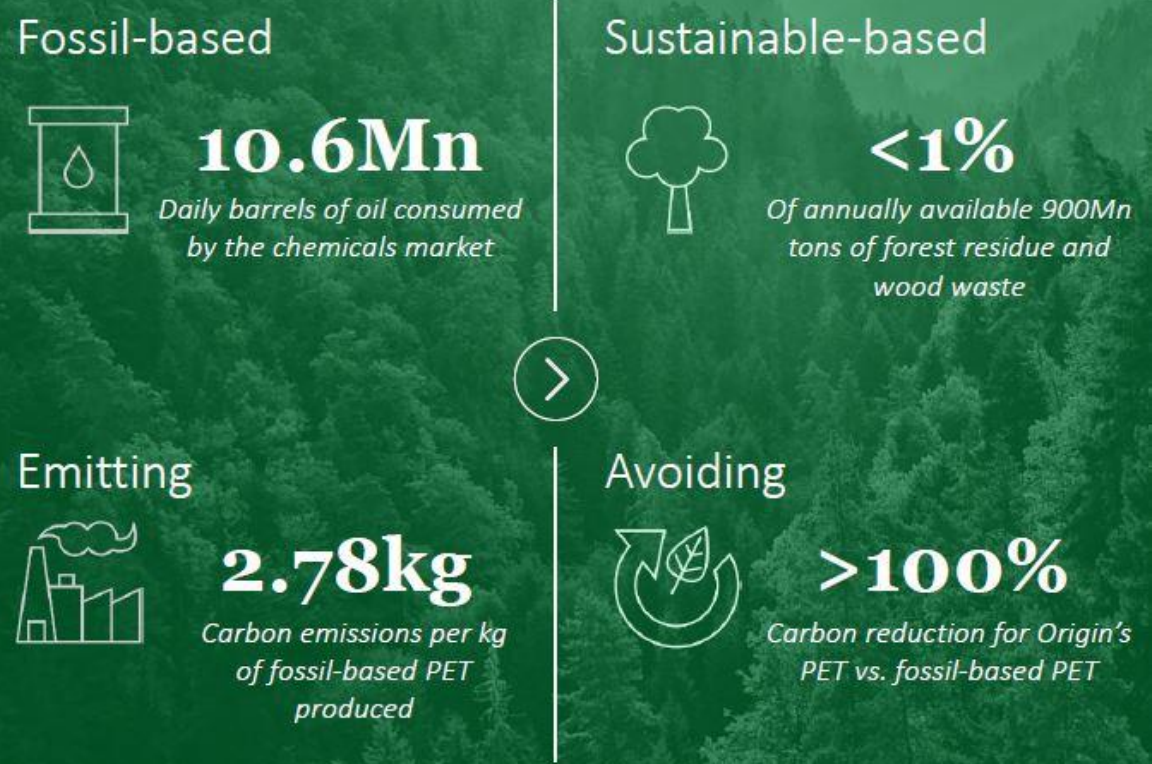
Nearly half of all global emissions come from making products

Total global emissions, 2016





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



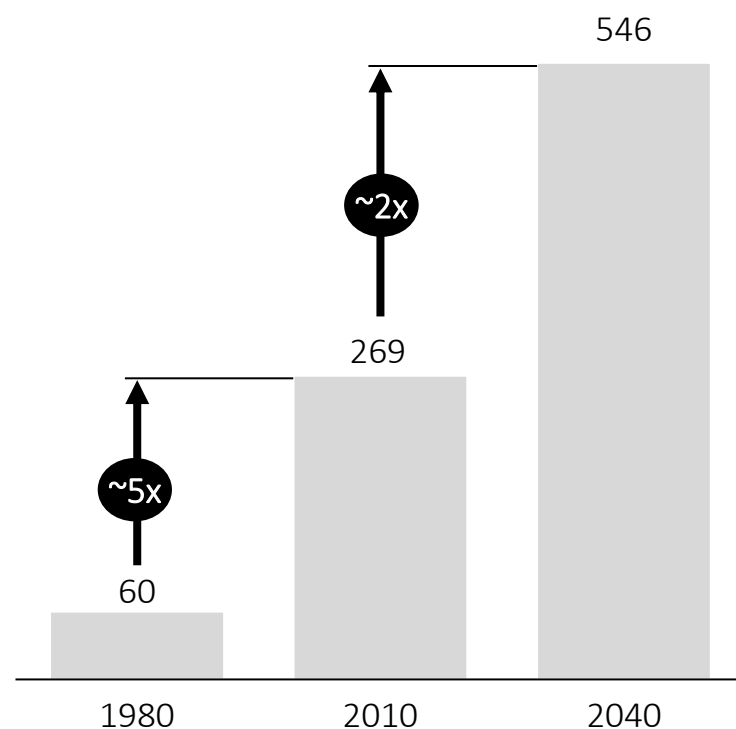
The Origin platform can replace oil as the foundational feedstock for the materials economy

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.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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

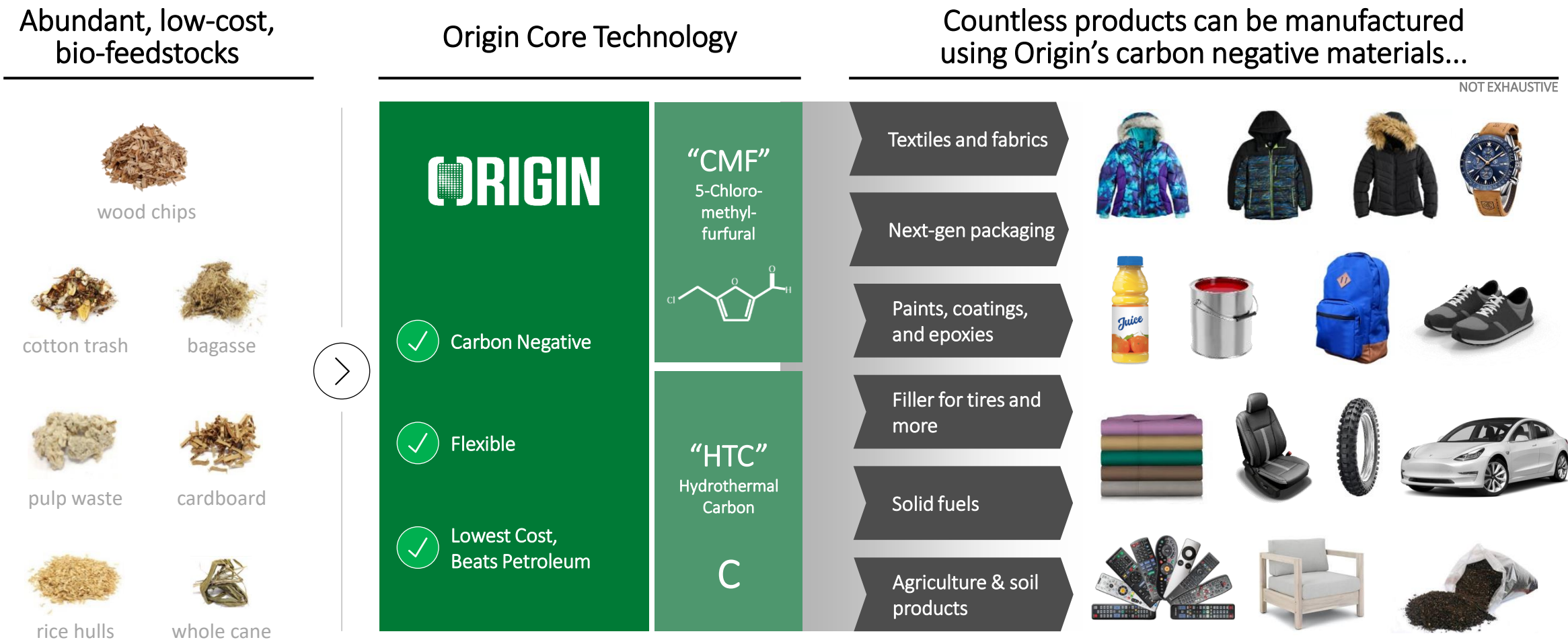
Sustainably harvested, renewable feedstocks (e.g., forest waste / residues) can convert naturally captured carbon into useable end products



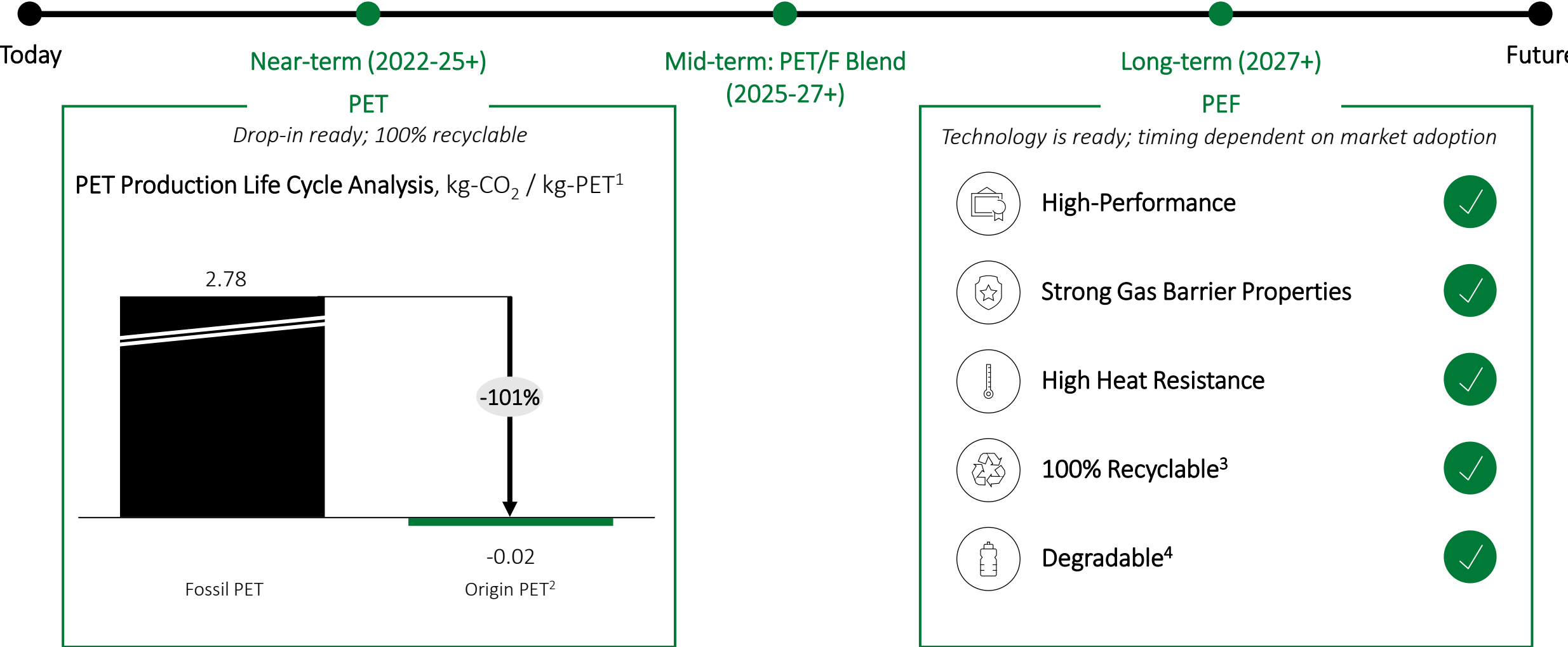
Sustainable, end of life solutions (recycle first)

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

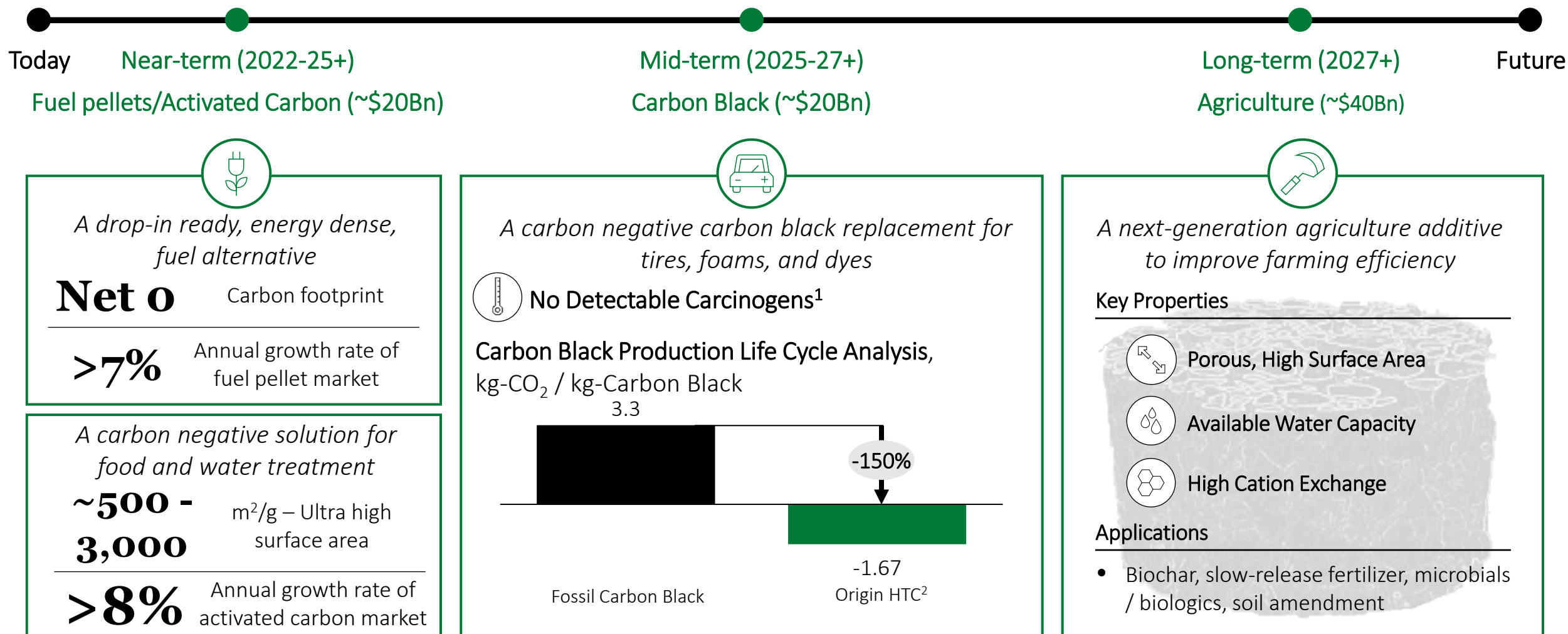


Origin's CMF is a carbon negative solution for recyclability and degradability



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. PEF degradation time in industrial composting conditions (58 °C) range from 7 to 13 months to 90% degradation, depending on conditions, according to "First Results Accelerated Tests Biodegradation of PEF," Organic Waste Systems (OWS), Gent, Belgium.
Source: Origin Materials. As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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



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.

As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

Origin's platform technology decarbonization impact

By 2030, Origin's operating plants are expected to annually avoid ~8.3MMT¹ CO₂ equivalent to approximately...

~960,000



homes' electricity use for 1 year

~1,800,000



passenger vehicles driven for 1 year

~19,000,000



barrels of oil consumed

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>

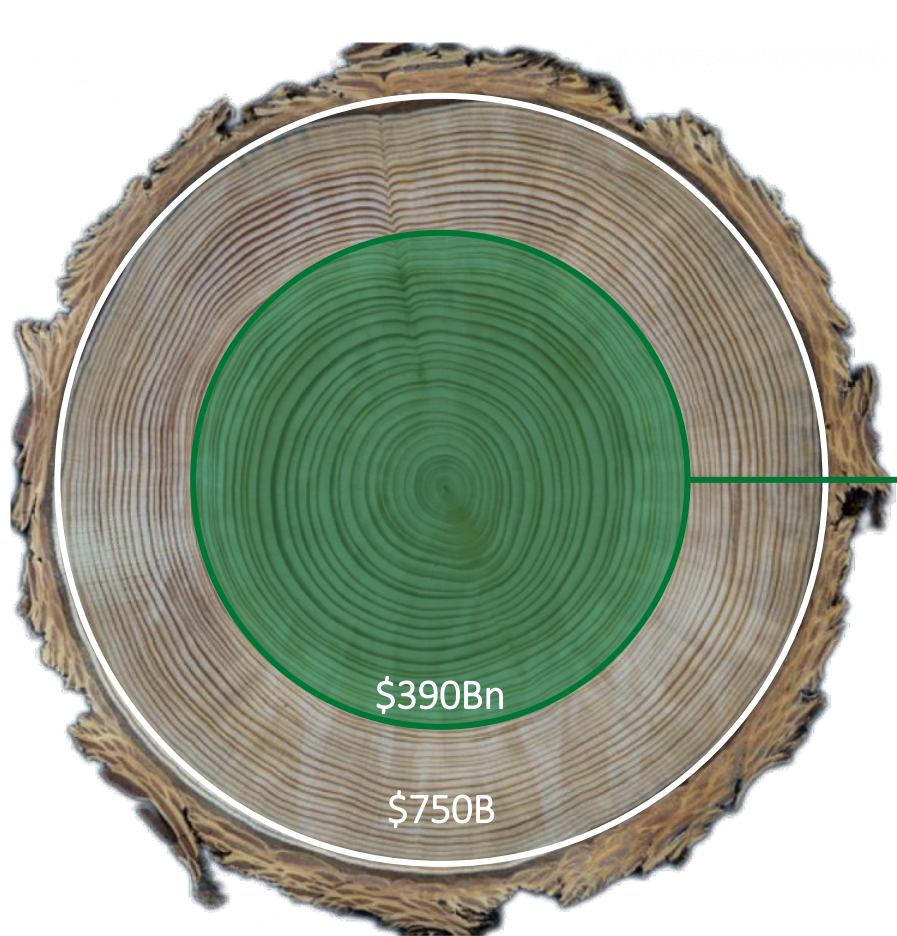
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.








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

Origin addresses a growing market with broad applications

 HTC market  CMF market

Cumulative TAM = >\$1Trn



| Markets | Market Size |
|---|--|
| | \$ |
| PET Fiber | ~\$175Bn |
|  Apparel | |
|  Carpet | |
| PET Resin | ~\$145Bn |
|  Food and beverage packaging | |
| Carbon | ~\$70Bn |
|  Tires |  Activated Carbon |
|  Foams |  Fuel pellets |

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



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

Source: Origin Materials management estimates based on 2030 addressable market.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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



Source: Origin Materials management estimates based on 2030 addressable market.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

Origin is supported by Global Fortune 500 companies

PackagingNews


NEWS MATERIALS MARKETS PN TV FEATURES EQUIPMENT EVENT

Home » News » Markets » Drinks

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.



DANONE and NESTLE WATERS have joined force with ORIGIN MATERIALS to create the next generation plastic bottle

2017



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

4.75Mn
Tons

~20
Commercial facilities
required to meet PET
demand¹

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.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

AECI SANS Technical Fibers Partnership



“Origin Materials and AECI SANS Technical Fibers to Develop Carbon-Negative Materials for Apparel and Automotive Applications” – April 5, 2021

- AECI SANS Technical Fibers is a leader in engineered thread for high-performance apparel and automotive applications
- Expands existing joint development agreement in order to develop high-performance fibers for diverse thread applications serving the apparel, footwear and automotive industries
- AECI SANS Technical Fibers signed a capacity reservation agreement for carbon-negative PET and next-generation polymers produced using the Origin platform



AECI Much Asphalt Partnership



“Origin Materials and AECI Much Asphalt to Develop Low-Carbon Asphalt” – April 6, 2021

- AECI Much Asphalt is the largest commercial asphalt producer in southern Africa
- Region’s leading manufacturer and supplier of hot and cold mix asphalt products, and a manufacturer, supplier and applicator of bituminous road binders, emulsions, primes, pre-coats and modified binders
- The collaboration is expected to create substantial value in the developing African market, where AECI Much Asphalt is currently active



Packaging Matters Partnership



“Origin Materials and Packaging Matters Launch Partnership to Develop Advanced Carbon-Negative Packaging Solutions, Building on Existing 10-Year Supply Agreement” – April 12, 2021

- Packaging Matters is a leader in packaging innovation with several Fortune 100 food companies as customers
- Development work to produce advanced packaging materials, including PEF
- Packaging Matters will transition its virgin petroleum-based PET purchases to sustainable carbon-negative PET from Origin Materials.
- As the companies make progress on developing PEF applications, some or potentially all of the supply is expected to transition to PEF
- 40+ years PET experience
- 3 manufacturing facilities in the United States

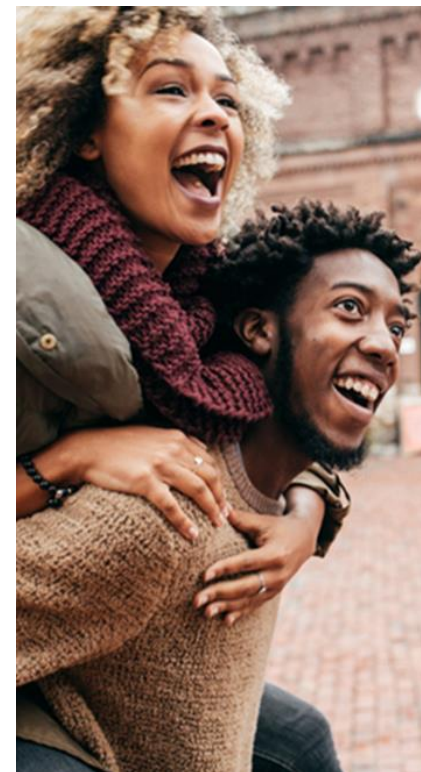


PrimaLoft Partnership



“Origin Materials and PrimaLoft Form Strategic Alliance to Develop Carbon-Negative Insulating Fiber for Outdoor Gear, Bedding, and Apparel” – April 19, 2021

- PrimaLoft is advanced material technology company and a world leader in the development of high-performance insulations and fabrics
- Launched strategic alliance to develop high-performance, carbon-negative insulating fibers for diverse apparel applications, including for leading outdoor, fashion, and lifestyle brands, plus home goods applications such as hypoallergenic insulated bedding
- Signed capacity reservation agreement for carbon-negative PET produced using the Origin Materials technology platform
- Fibers to address demand for sustainable, high-performance materials from over 900 global brand partners
- PrimaLoft iconic brand partners include Patagonia, Stone Island, L.L. Bean, Lululemon, adidas and Nike



Solvay Partnership



Solvay and Origin Materials to Develop Advanced Carbon-Negative Materials for Automotive Industry – April 19, 2021

- Solvay, founded 1863, is a global leader in chemicals and materials with more than 23,000 employees in 64 countries, and net sales of €9 billion in 2020
- Collaboration to develop advanced materials for the automotive industry, including a drop-in ready specialty polyamide, a polymer for internal combustion engine technology as well as e-mobility systems like e-motors and power electronics that can provide resistance to heat, toughness, corrosion, and operate at high voltages
- The companies believe these materials will be critical to decarbonize supply chains in the automotive industry and achieve the zero-carbon car
- “The cooperation with Origin Materials is a new important element in our continuous commitment to sustainability which, together with our customers, is at the heart of our operations and growth strategy,” said Mike Finelli, President of Solvay Specialty Polymers. “Today carbon negative-materials can be added to the evolution of our sustainability roadmap, which already includes different actions from the integrated use of renewables to generate electricity in our plants to pursuing more sustainable products with bio-sourced monomers or recycled content.”

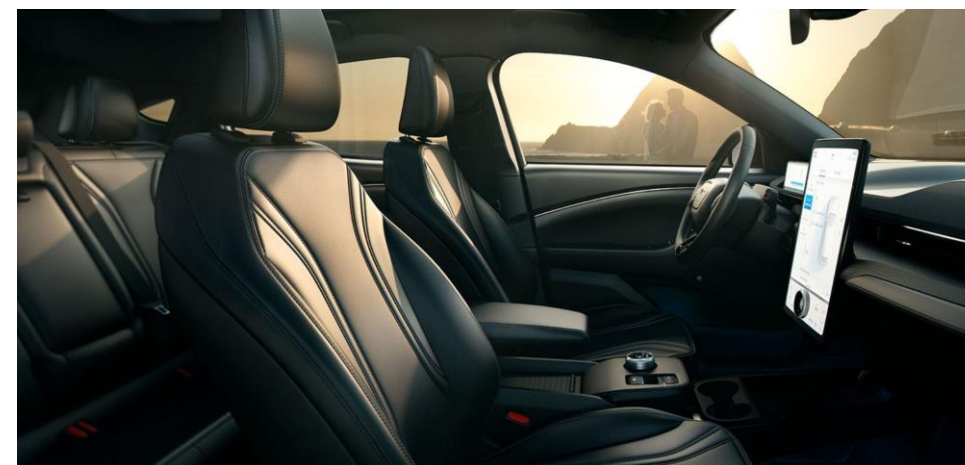


Ford Partnership



“Origin Materials Launches Net Zero Automotive Program With Ford Motor Company” – June 10, 2021

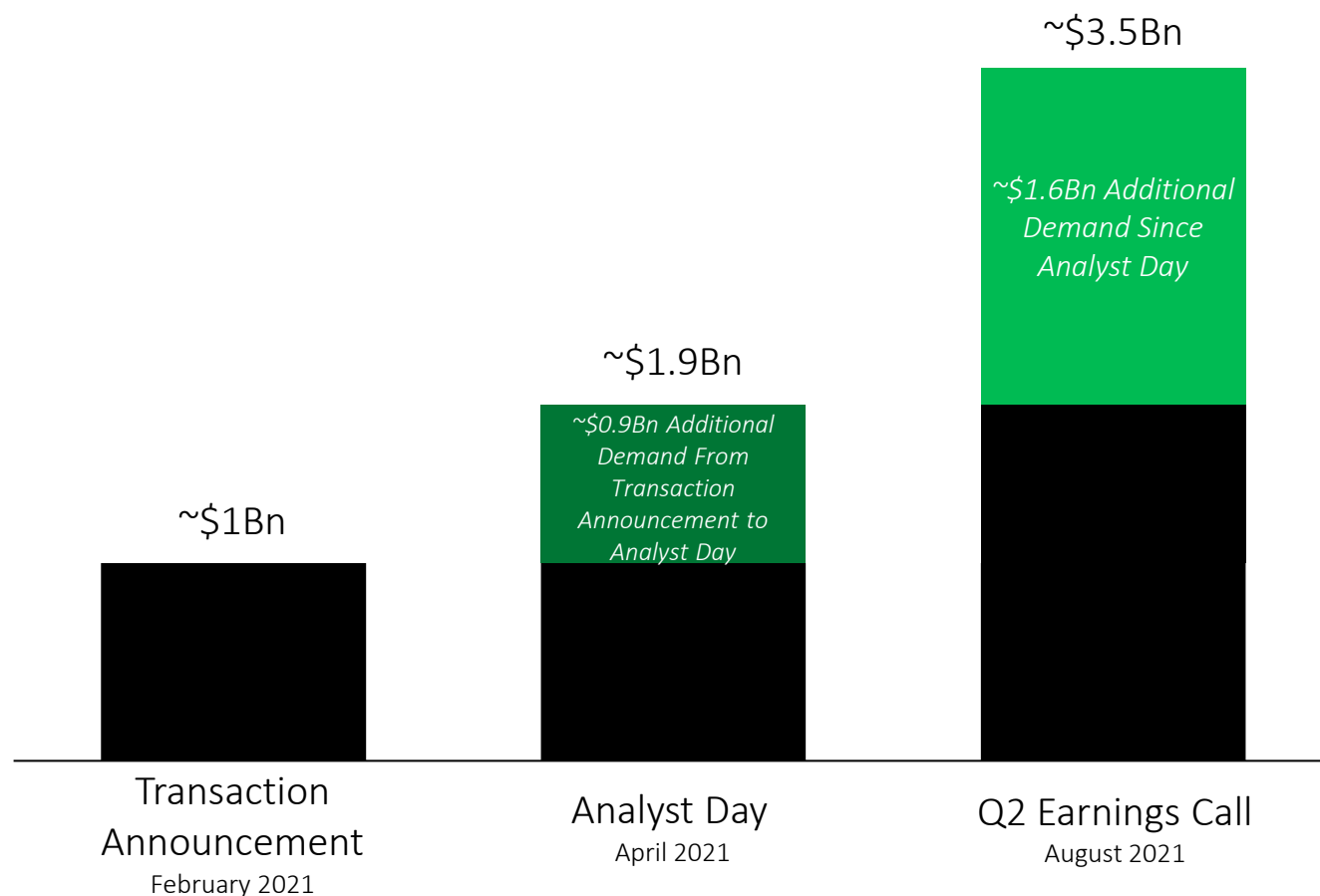
- Launched Net Zero Automotive Program, a sustainable automotive supply chain initiative focused on industrializing new materials to drive decarbonization in the automotive industry
- Partnership will pursue drop-in applications for carbon negative PET plastic (polyethylene terephthalate) produced from sustainable wood residues with Origin technology
- Ford and Origin will also work together to develop sustainable pigments and fillers for automotive applications throughout the interior and exterior of the vehicle, including bumpers, paint pigment, door panels, tire filler, underbonnet foam sheet, black plastic, head rests, seat cushions, and arm rests



Origin has grown customer demand by ~\$2.5Bn since announcing transaction

Total demand is \$3.5Bn in either offtake agreements or capacity reservations¹

Customer Demand, \$Bn cumulative



Select Origin Customers & Partners

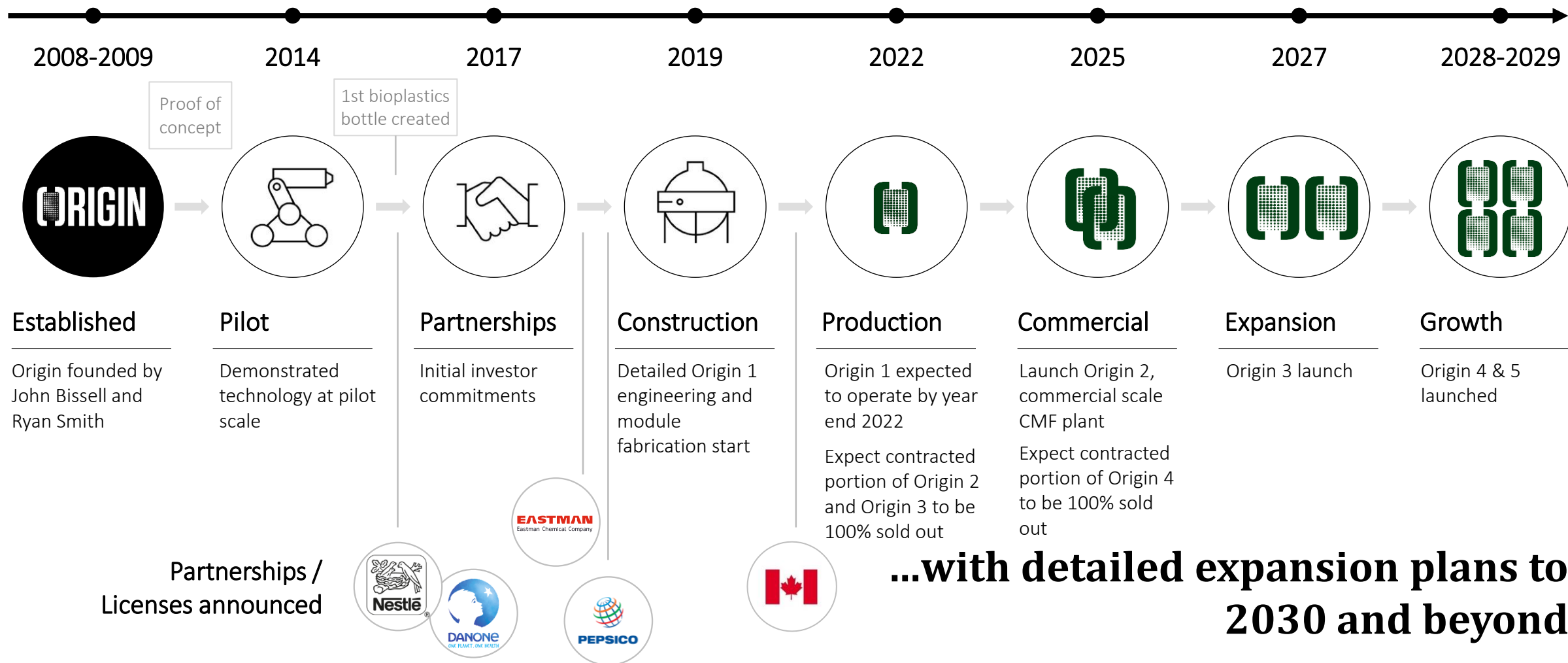


MITSUBISHI GAS CHEMICAL



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

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



...with detailed expansion plans to 2030 and beyond

Construction – process modules

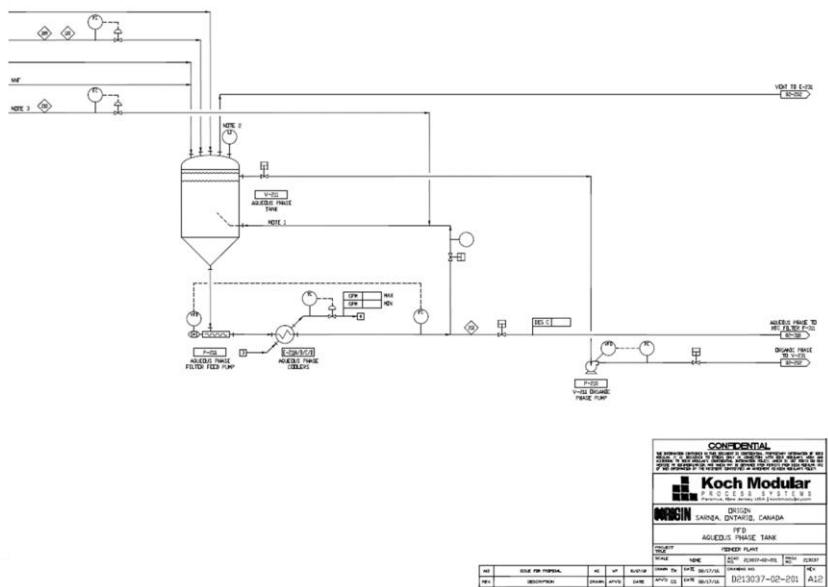
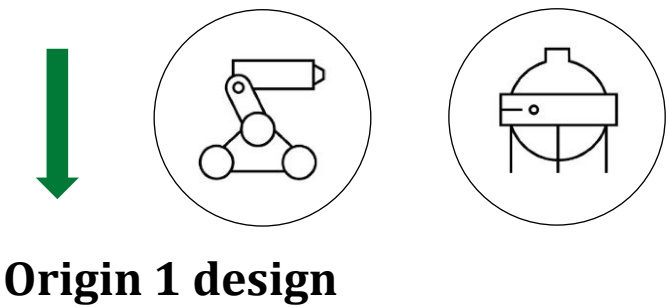
The 17 completed core process modules, fabricated by Koch Modular, are ready for installation at Origin 1 site in Sarnia, Ontario.

- The unique, Origin-specific technology components of Origin 1 are already fabricated
- Installation involves lifting these units from the horizontal position (per the images) to vertical on bolted concrete foundations
- The modules weigh about 60 to 75 tons each
- The bottom image shows key piping support, instrumentation, valves, and control junction boxes
- Origin has already completed installation of most foundations for building and process areas at the construction site



Construction – Origin 1 story (1 of 2)

>10 years bench/pilot scale chemistry & engineering



Origin 1 core technology module fabrication



Construction – Origin 1 story (2 of 2)



Foundations



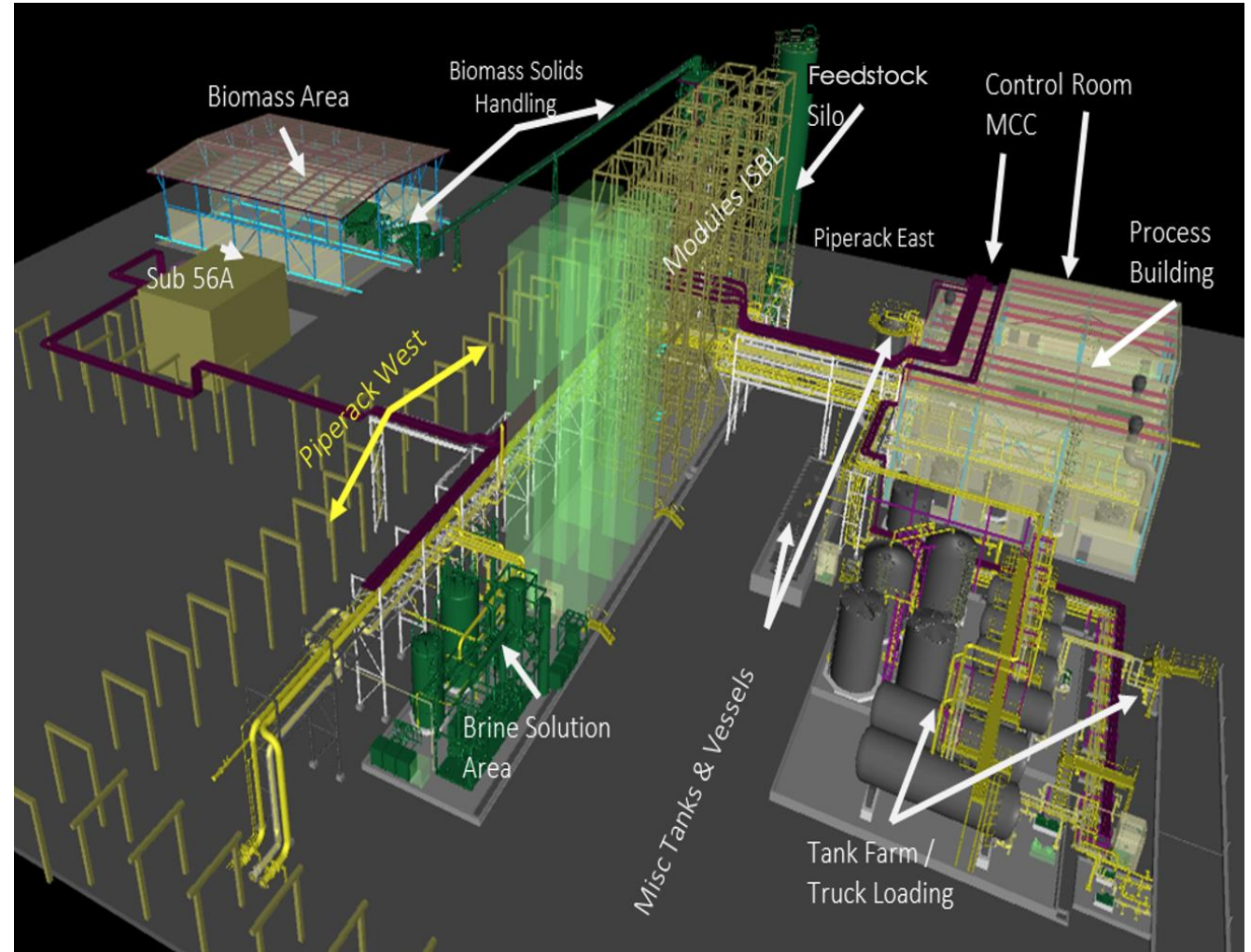
Tanks & other equipment



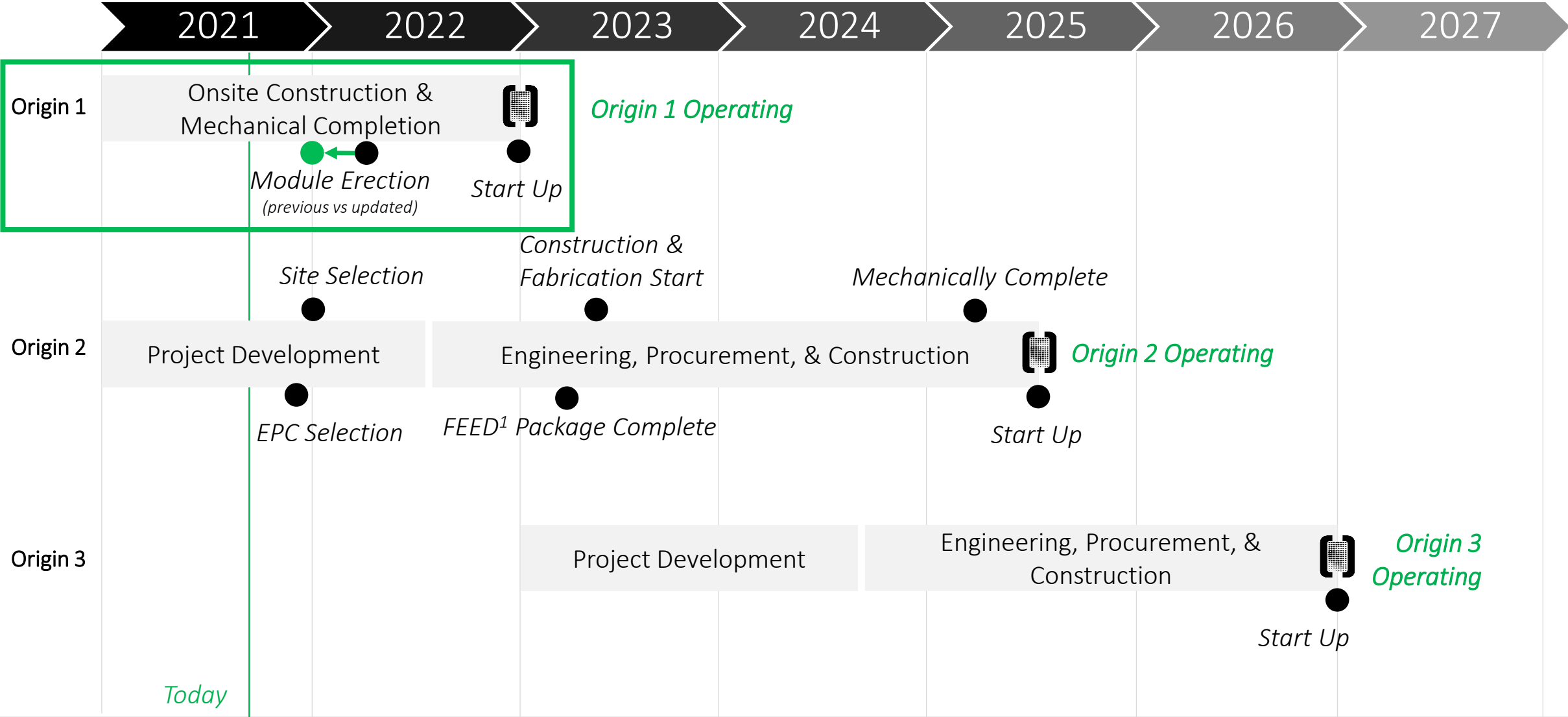
Core technology modules



Origin 1 Plant



Construction schedule – Origin 1, Origin 2, and Origin 3

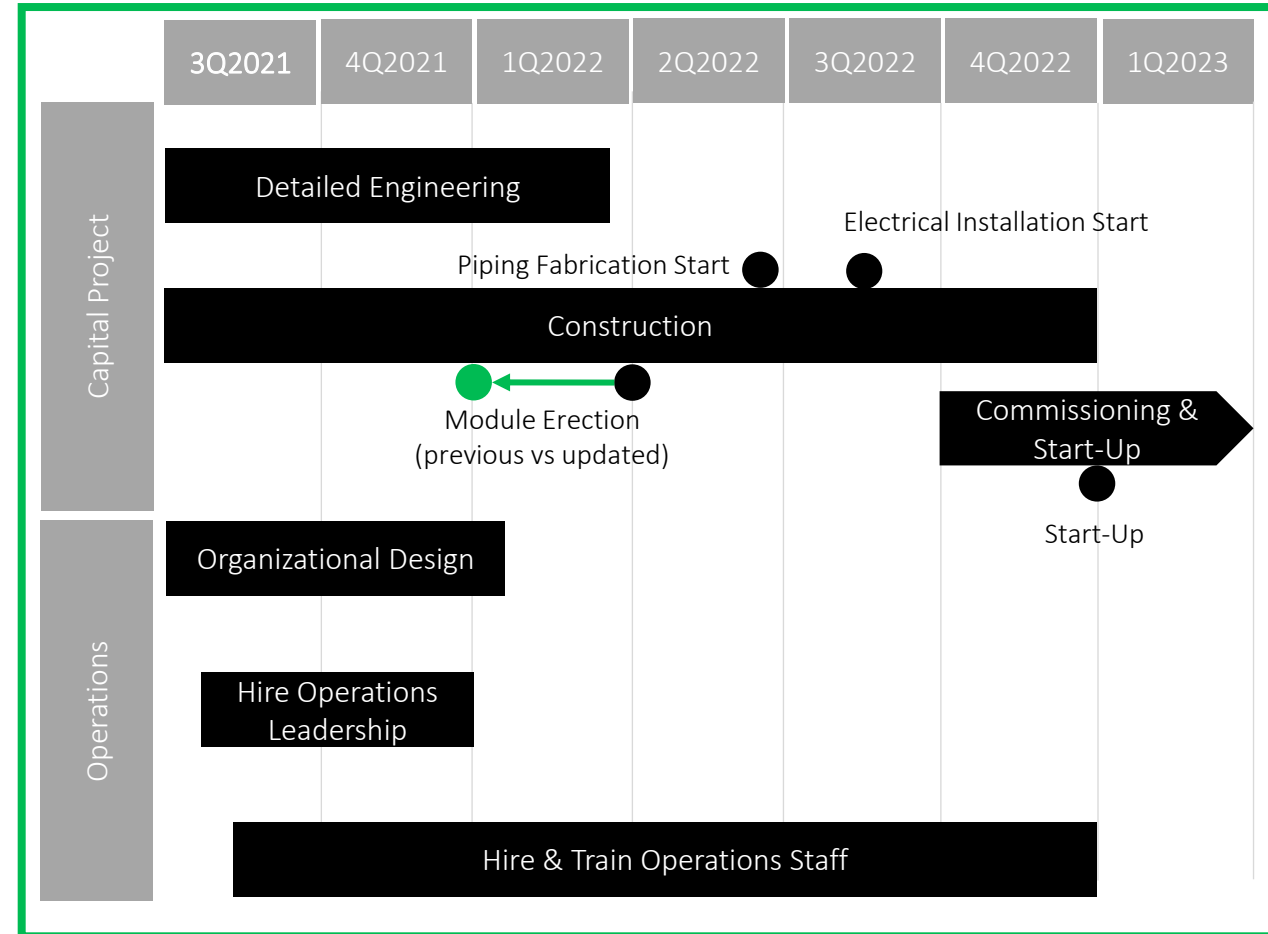


1. Front-end engineering design.

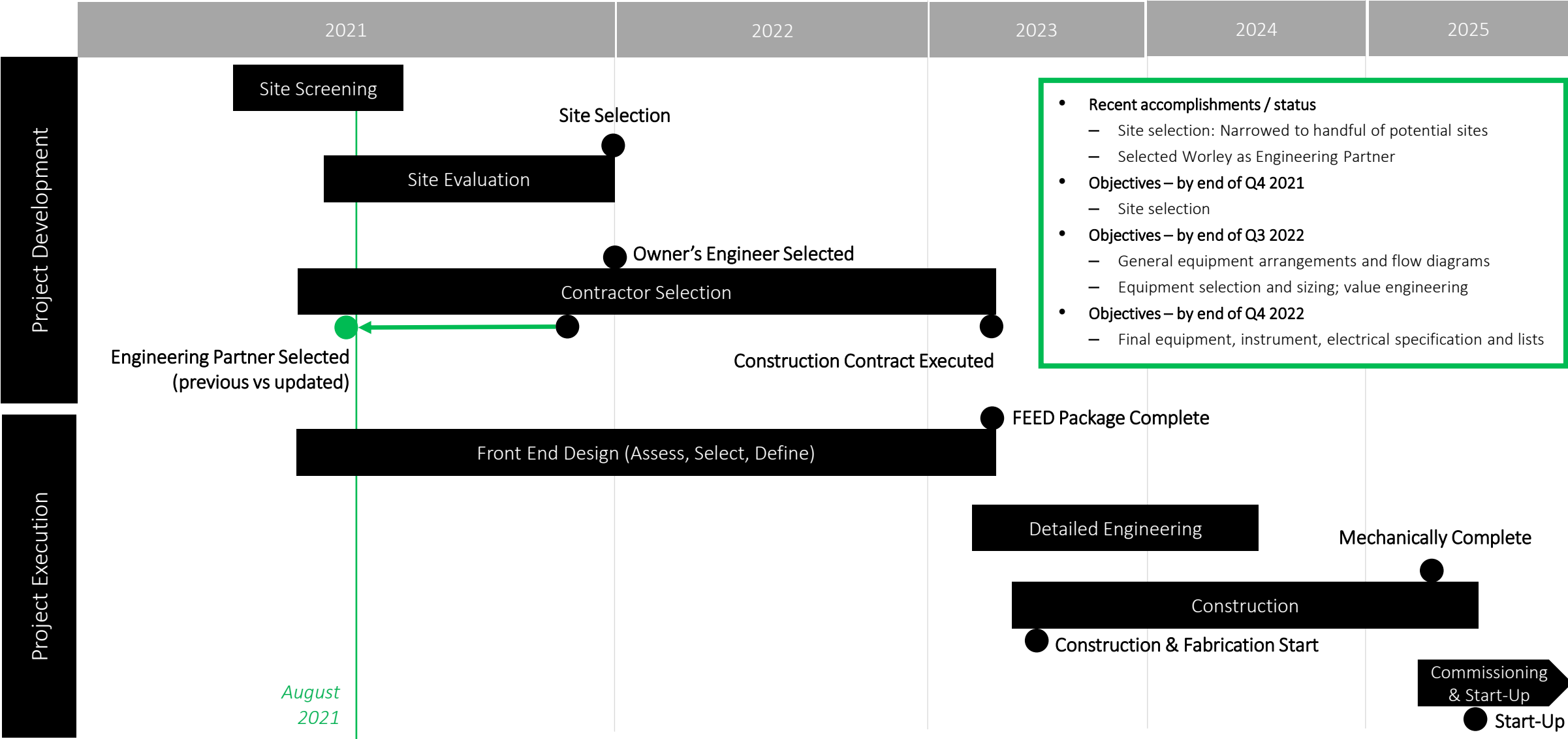
Construction schedule – Origin 1

- **Origin 1 – plant purpose**
 - Produce CMF and HTC at commercial volumes
 - Produce CMF and HTC and other intermediates in volumes that allow customers to qualify products and applications other than PET
- **Recent accomplishments / status**
 - Engaged Worley as our engineering partner
 - Engaged additional key engineering & construction mgmt. partners
- **Objectives – by end of Q3 2021**
 - Achieve activities required to enable module lift by end of Q4 2021
 - Hire Process Automation Lead, additional Project Manager/ Project Engineer
- **Objectives – by end of Q4 2021**
 - Hire Origin 1 operating leadership: Site & Plant Director, Operations Manager, Site EHS&S (Environmental Health, Safety, and Security) Manager
 - Complete structural elements of plant ISBL and complete foundations of auxiliary process buildings
 - Erect main plant modules
- **Objectives – by end of Q1 2022**
 - Receive additional major equipment (tanks, etc.)
 - Receive ENCON evaporator modules
- **Objectives – by end of Q2 2022**
 - Piping fabrication start
- **Objectives – by middle of Q3 2022**
 - Piping & electrical installation start

Origin 1 Timeline (Detail View)



Construction schedule – Origin 2



Construction – execution

Recent Additions to Technical Leadership Team –
Proven Expertise in Plant Construction & Technology Scale-Up

Capital Project Partners



Bob Nissen
Origin 2 Project Director



David Ballow
Origin 2 Process
Technology Director



Phil McAllister
Origin 1 Project Director



Jim Wells
Technical Director



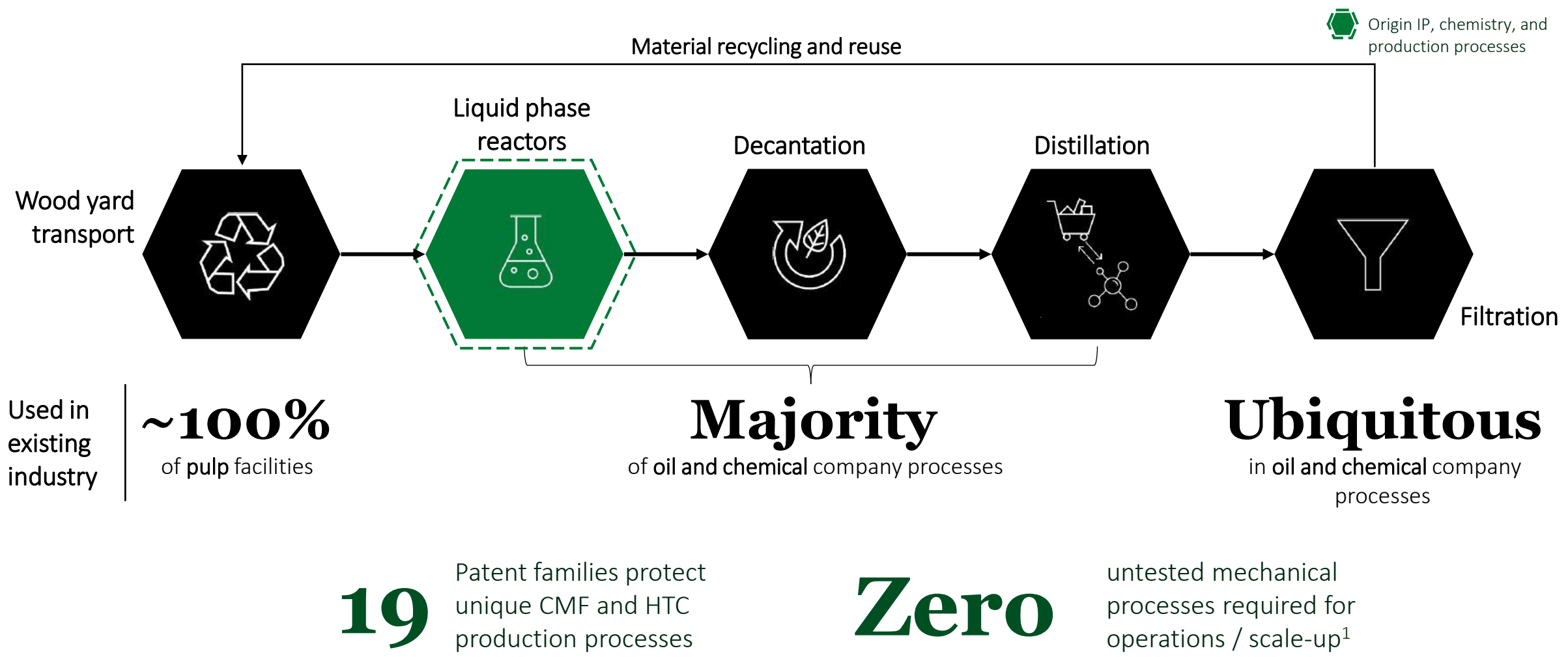
Madhu Anand, PhD
Technical Director



Ben Freireich, PhD
Technical Fellow



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



1. Origin does not rely on any novel mechanical processes in its plants. All of Origin's mechanical processes are standard mechanical processes utilized in the chemicals and refining industry.
Source: Origin Materials.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

Origin’s technology uses conventional chemical processing, which is inherently well suited to scale-up

Moreover, Origin technology offers additional technical and economic advantages for process scale-up

Origin technology scale-up advantages

Proven approach for scaling up bio-processes

Conventional chemical bio-processes that have scaled up include bio-diesel, Kraft process, PLA, ethanol to ethylene, and renewable diesel

Conventional equipment

Standard equipment used in the chemical industry for centuries makes scale-up more straightforward than processes requiring new mechanical designs

Extensively tested at pilot scale

Origin’s process has been extensively run and stress tested at pilot scale for over 10 years

Powerful demand pull

Carbon efficiency and the low cost & volatility of feedstock drive demand for Origin’s products

Technology comparison

| | Origin conventional chemo-catalytic chemical process | Fermentation Process | Thermochemical Process (e.g. gasification / pyrolysis) |
|--|--|---|--|
| carbon efficiency (product yield ¹) | high ✓ (removes oxygen via H ₂ O) | low (removes oxygen via CO ₂) | low (removes oxygen via CO ₂) |
| feedstock variation | robust ✓ (a vast number of compositions can be used) | moderate ✓ (causes stress and inhibition) | fragile (salt accumulation and process inhibition) |
| equipment | conventional ✓ | conventional ✓ | novel |
| temperature | moderate ✓ | moderate ✓ | high |

1. Yield of carbon in product as a fraction of carbon input

Origin has meaningful advantages over bioplastics companies

| | ORIGIN | Company A PHA | Company B PEF / FDCA | Company C PLA | Fossil |
|---|--|----------------------------|------------------------------------|----------------------------------|--------------------------------|
| <div>✓</div> <div>Origin advantaged category vs. non-fossil competitors</div> | | | | | |
| TAM \$ Bn | \$1,000 | \$0.1 - \$0.5 | \$250 | \$1.5 - \$5.0 | \$1,960 |
| Carbon footprint ¹ , indexed to fossil | <0 | ~0.7 | 0.3 | 0.3 | 1.0 |
| Illustrative 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 ² | No existing infrastructure | Limited Infrastructure | Extremely limited infrastructure | Strong existing infrastructure |
| Degradability | Non-degradable PET; Industrial composting PEF ³ | Natural composting | Industrial composting ³ | Industrial composting | Non-degradable |



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

As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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

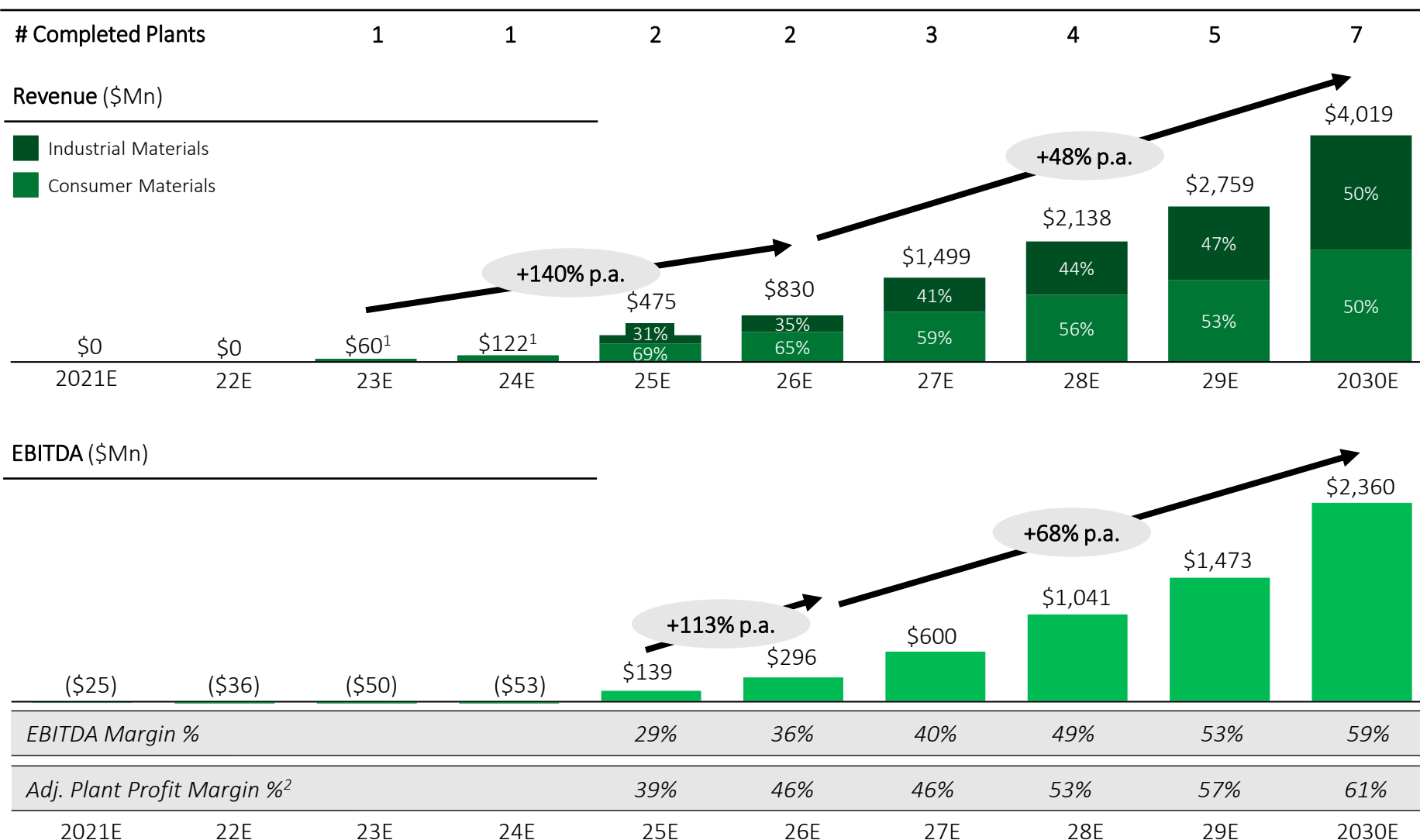
- Attorney at Irell & Manella, LLP
- Sr. Analyst at Strumwasser & Woocher, LLP





**Appendix A:
Previously Disclosed
Financial Details
(Analyst Day 4/19/21,
8-K, 10-Q Filings)**

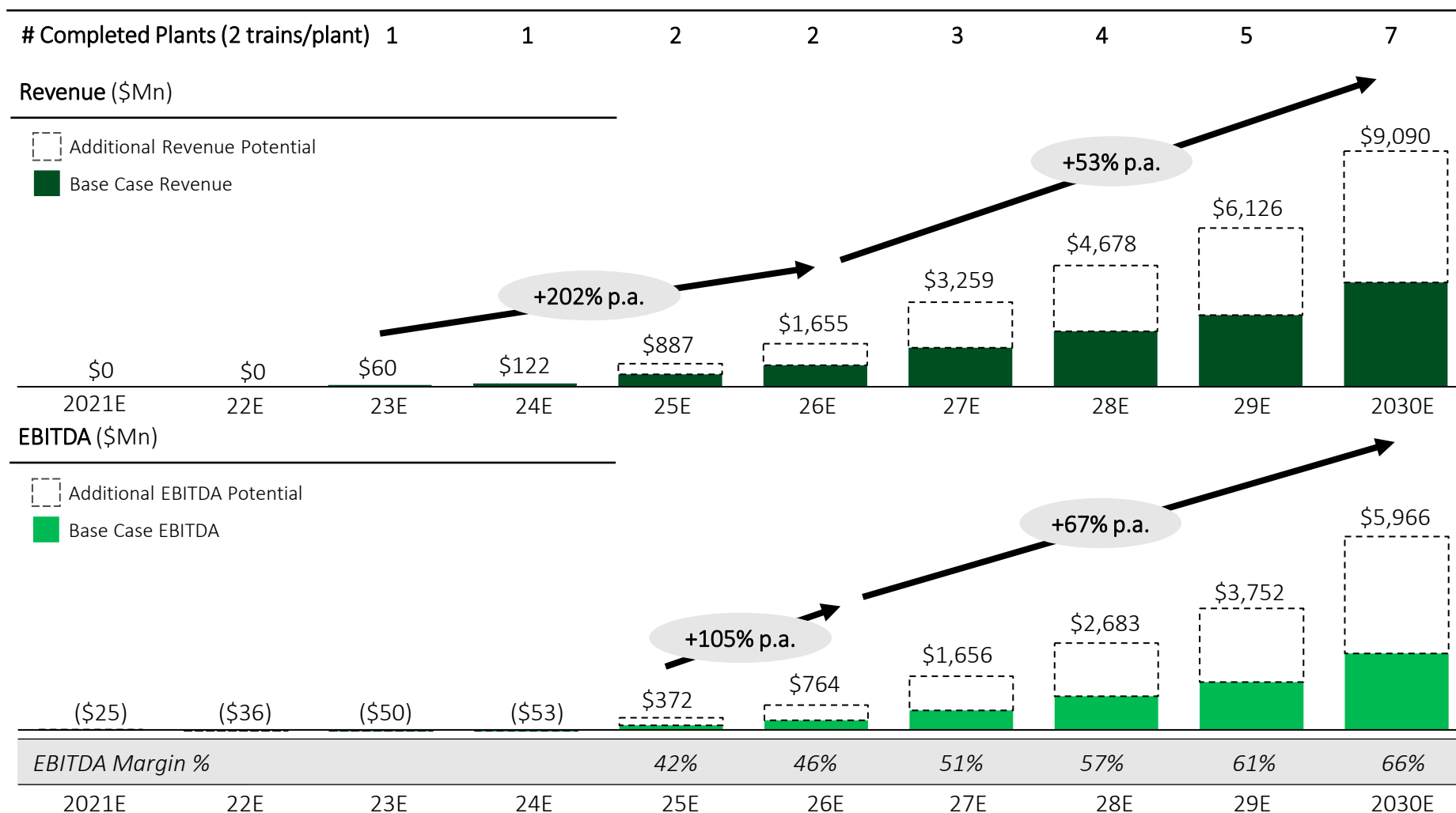
Origin expects to deliver a superior financial profile for years to come



- 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 are expected to 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

Source: Origin Materials management estimates. 1. 100% of revenue allocated to consumer materials. 2. A non-GAAP measure defined as Revenue less all plant direct cash costs (excluding depreciation, amortization, interest and taxes) divided by revenue. As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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 plan¹, 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

Long-term target operating model

| | Origin Plant 1 | | Origin Plant 2 | | Origin Plant 3-7 Average | |
|--|--|----------------|----------------|----------------|--|----------------|
| <u>Illustrative Run-Rate Economics</u> | | | | | | |
| Mn lb. biomass input | 49 | | 2,205 | | 2,205 | |
| Mn lb. products sold | 146 | | 2,412 | | 1,313 | |
| CapEx (\$Mn) | \$70 ¹ | | \$1,072 | | \$811 | |
| ROIC (Adj. plant margin/CapEx) | NM | | 35.9% | | 51.1% | |
| | | | | | | |
| | \$Mn | \$/lb. product | \$Mn | \$/lb. product | \$Mn | \$/lb. product |
| Revenue | \$122 | \$0.84 | \$708 | \$0.29 | \$637 | \$0.49 |
| Consumer materials | | | \$414 | | \$291 | |
| Industrial materials | \$122 | | \$294 | | \$346 | |
| Biomass feedstock | (\$7) | (\$0.05) | (\$56) | (\$0.02) | (\$56) | (\$0.04) |
| Other feedstock & variable costs | (\$7) | (\$0.05) | (\$93) | (\$0.04) | (\$108) | (\$0.08) |
| Tolling & downstream processing | (\$106) | (\$0.73) | (\$154) | (\$0.06) | (\$39) | (\$0.03) |
| Adj. Contribution ² | \$2 | \$0.01 | \$405 | \$0.17 | \$435 | \$0.33 |
| Plant labor + other fixed costs | (\$6) | (\$0.04) | (\$20) | (\$0.01) | (\$20) | (\$0.02) |
| Adj. Plant Profit | (\$4) | (\$0.03) | \$385 | \$0.16 | \$415 | \$0.32 |
| Primary Products | PET/F, CMF, higher value application development samples | | PET, HTC fuel | | PET, PET/F, PEF ³ , CMF, FDCA ⁴ , carbon black, activated carbon, HTC fuel | |

1. Denotes incremental capex to be spent in 2021-2022.

2. Reflected as adjusted gross profit in the base case projections included in the registration statement on Form S-4 as filed with the SEC by Artius Acquisition Inc. ("Artius") on March 9, 2021, as amended on May 25, 2021.

3. Polyethylene furanoate. 4. Furandicarboxylic acid. Source: Origin Materials management estimates.

As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

Anticipated fully funding of Origin 1 and Origin 2 from cash on hand and traditional project financing sources

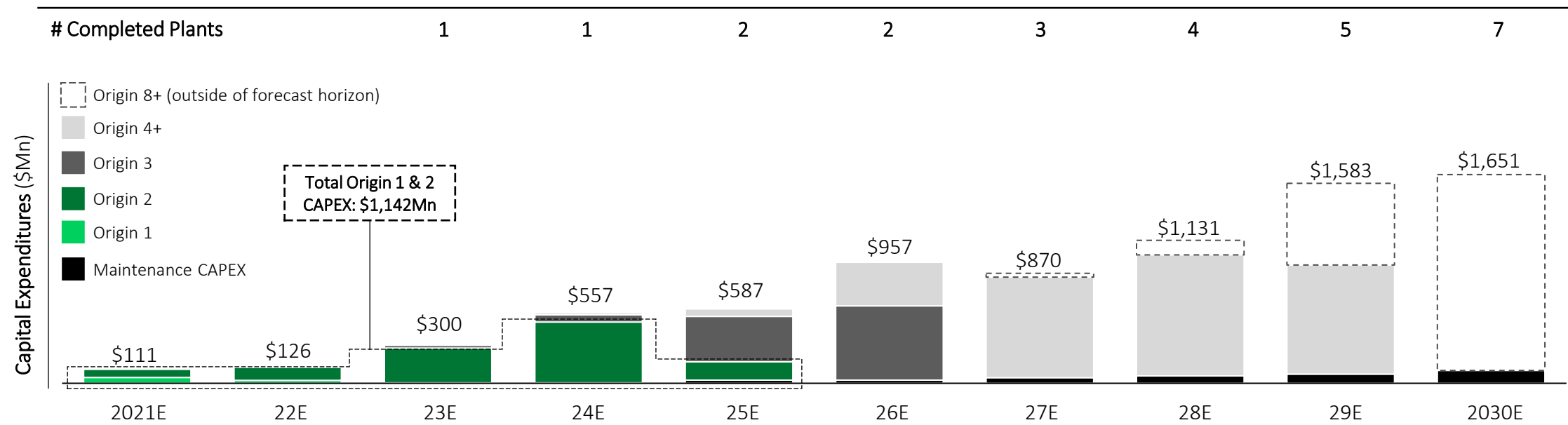
Cash Flow Sources & Uses from 2021E to Origin 2 Revenue in 2025E (\$Mn)

June 2021 Forecast

| | |
|--|--------------|
| Gross Proceeds | \$529 |
| Plus: Existing cash balance | 3 |
| Less: Transaction fees and expenses (net of prepaid out of existing cash balance) ¹ | (61) |
| Net Cash Balance² | \$471 |
| Add: Project Financing ⁴ | \$804 |
| Add: Local, State, and Federal Government Incentives / Support ⁴ | 185 |
| Less: Origin 1 Growth CAPEX ⁵ | (70) |
| Less: Origin 2 Growth CAPEX ⁵ | (1,072) |
| Less: Cash Flow from Operations '21 – '25 ³ | (218) |
| Remaining Cash to Fund Origin 3 and Beyond⁶ | \$100 |

1. Transaction expenses figure excludes \$3Mn prepaid out of existing cash balance; total transaction expenses including prepaid is \$65Mn. 2. Assumes none of the Artius warrants to acquire 35.5Mn shares are exercised. 3. Cash flow from operations calculated as EBITDA + Working Capital + Maintenance CAPEX from 2021 until reaching Origin 2 revenue in 2025. 4. Project financing and government incentives / support have not yet been secured. 5. Origin has confirmed its estimates for construction cost after considering the latest input from various suppliers, construction companies and consultants specializing in chemical plant constructions. Origin has built into its capital budget for Origin 1 and Origin 2 contingencies as a reserve for any unexpected construction "overrun" that are appropriate at this stage of planning. 6. Defined as net proceeds less annual cash flow from operations less equity financed growth CAPEX for Origin 1 and 2. Source: Origin Materials management estimates. As previously reported on Origin's Form 8-K filed on August 12, 2021.

Anticipated fully funded growth plan to profitability



- Current transaction and anticipated financing and grants are 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

Share count

| <u>Class</u> | <u>Outstanding Shares of Common Stock</u> |
|---|--|
| Total Shares Outstanding¹ | 136,748,470 |
| Shares subject to forfeiture ¹ | 4,500,000 |
| Total Shares Outstanding, including Shares subject to forfeiture¹ | 141,248,470 |
| | <u>Shares Reserved for Future Issuance</u> |
| | <u>Pursuant to Potential Earnouts,</u> |
| | <u>Outstanding Warrants, and Options</u> |
| Public Warrants ² | 24,150,000 |
| Private Warrants ² | 11,326,667 |
| Legacy Origin Earnout Shares ³ | 25,000,000 |
| Options ^{4, 5} | 7,945,956 |
| Total Shares⁵ | 209,671,093 |

1. 4.5 million shares held by a certain stockholder subject to forfeiture in three equal installments unless our Common Stock reaches certain trading price thresholds within certain specified time periods (10 consecutive trading day closing volume weighted average price targets of \$15, \$20, and \$25 within 3, 4 and 5 years after the closing of the business combination between Artius and legacy Origin (the "Business Combination"), respectively) 2. Warrant exercise price = \$11.50 per share. 3. 25,000,000 Earnout Shares are subject to issuance in three equal installments if our Common Stock reaches certain trading price thresholds within certain specified time periods (10 consecutive trading day closing volume weighted average price targets of \$15, \$20, and \$25 within 3, 4 and 5 years after the closing of the Business Combination, respectively). 4. Includes 6,464,425 options with a weighted average strike price of \$0.21/share and 1,481,531 performance-based options at \$0.14/share (423,294, 634,942, and 423,295 performance-based options vest if our Common Stock reaches volume weighted average price thresholds of \$15, \$25, and \$50 per share respectively for 10 consecutive trading days). 5. Excludes shares available for future issuance pursuant to our equity incentive plan and employee stock purchase plan. As previously reported on Origin's 424(b)(3) filing dated August 12, 2021.

Reconciliation of GAAP and Non-GAAP results

We believe that the presentation of Adjusted Earnings before Interest, Taxes, Depreciation, and Amortization (Adjusted EBITDA) is appropriate to provide additional information to investors about our operating profitability adjusted for certain non-cash items, non-routine items that we do not expect to continue at the same level in the future, as well as other items that are not core to our operations. Further, we believe Adjusted EBITDA provides a meaningful measure of operating profitability because we use it for evaluating our business performance, making budgeting decisions, and comparing our performance against that of other peer companies using similar measures.

We define Adjusted EBITDA as net income or loss adjusted for (i) stock-based compensation expense, (ii) depreciation and amortization, (iii) interest expense, net of capitalized interest, (iv) change in fair value of derivative liability, (v) change in fair value of warrants liability, (vi) change in fair value of earnout liability, and (vii) other income, net.

| | Three Months Ended June 30, | | Six Months Ended June 30, | |
|---|-----------------------------|-------------------------|---------------------------|-------------------------|
| | 2021 | 2020 | 2021 | 2020 |
| Net Income (loss) | \$62,531 | \$(1,693) | \$8,961 | \$(3,663) |
| Stock based compensation | 3,545 | 9 | 4,172 | 18 |
| Depreciation and amortization | 121 | 100 | 236 | 204 |
| Interest expense, net of capitalized interest | 2,560 | 50 | 2,839 | 113 |
| Change in fair value of derivative liability | 1,035 | (12) | 1,426 | (15) |
| Change in fair value of warrants liability | (27,265) | 105 | 20,844 | 105 |
| Change in fair value of earnout liability | (45,497) | - | (45,497) | - |
| Other Income, net | (42) | (157) | (624) | (168) |
| Adjusted EBITDA | <u><u>\$(3,012)</u></u> | <u><u>\$(1,598)</u></u> | <u><u>\$(7,643)</u></u> | <u><u>\$(3,406)</u></u> |

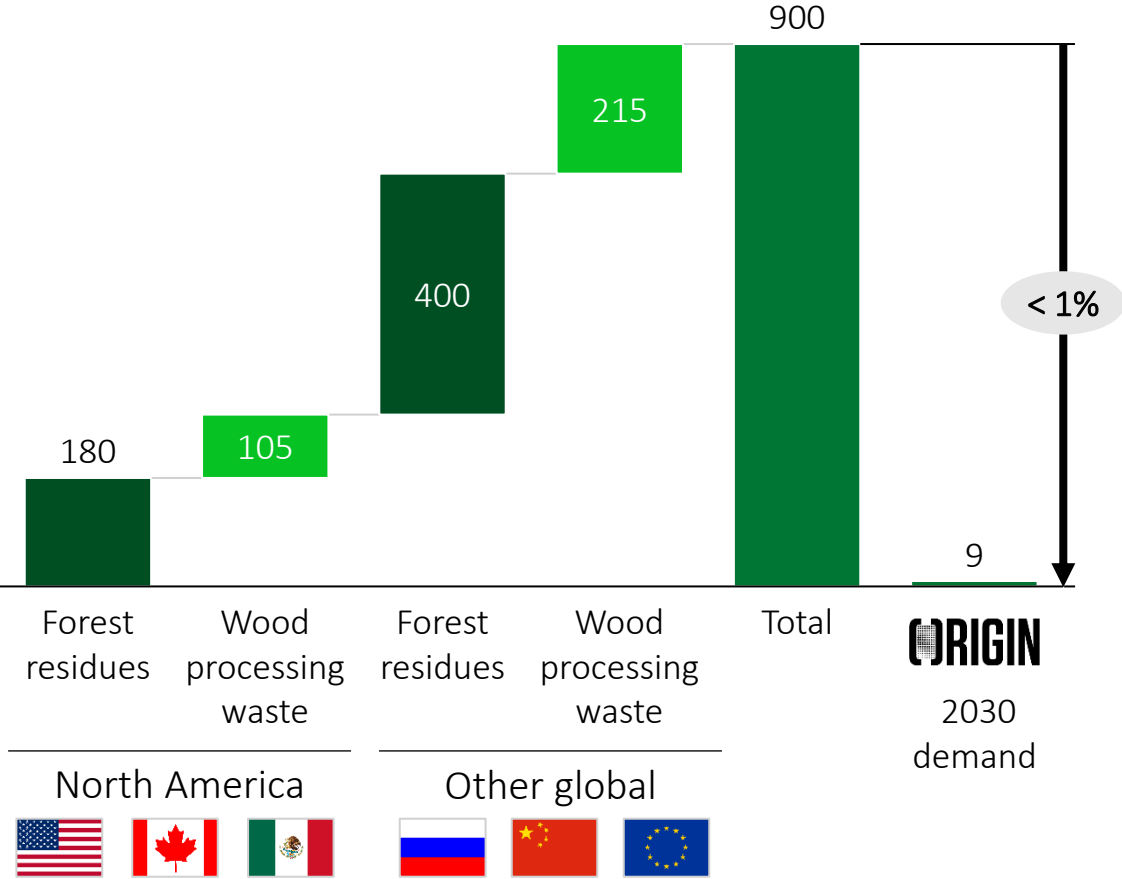


Appendix B: Other Previously Disclosed Materials

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

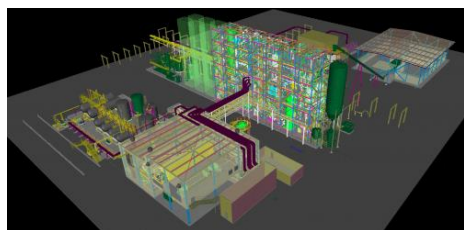
“Putting it all together”

- 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 participants¹:



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.

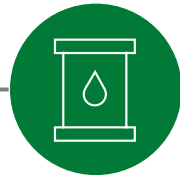
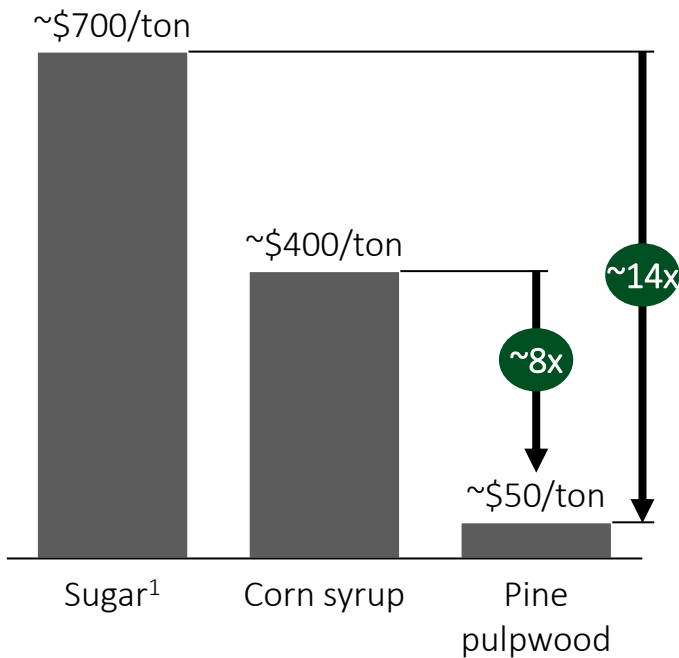
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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



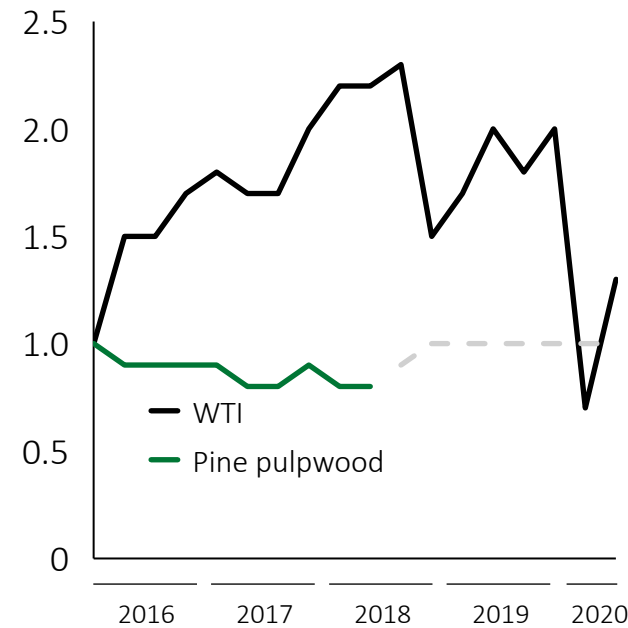
8x-14x cheaper than competing renewable feedstocks

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.
As previously reported on a Rule 425 filing of Artius Acquisition, Inc. dated April 19, 2021.

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

Glossary

| Abbreviation | Explanation |
|-----------------|---|
| 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 |



The world's leading carbon negative materials company