



First Quarter 2023 Earnings Call

The world's leading carbon negative materials company

May 10, 2023

Forward looking statements and disclaimers

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Q1 2023 highlights

Customer demand remains strong and broad based

- Offtake and capacity reservation agreements exceed \$9.3 billion¹
- Indorama Ventures, the world's largest producer of virgin and recycled PET resins, signed a memorandum of understanding ("MOU") to explore initiatives related to the rapid commercialization of bio-based materials
- SCGP, a leading multinational consumer packaging solutions provider, signed a joint development agreement ("JDA") to explore licensing Origin technology for Asia-based plant and the use of eucalyptus as a feedstock
- Hyosung, a Korea-based industrial materials company, signed a multi-year capacity reservation agreement with Origin
- Expanded partnership with Minafin Group to launch Origin 1 manufacturing initiative
- Amended existing agreement with PepsiCo to increase flexibility by expanding the slate of products that may be supplied as well as which plants may supply those products, with final volumes, product mix, and plants to be as mutually agreed upon

Origin 1 on track, Origin 2 progressing, strong product development

- Origin 1 is mechanically complete. Commissioning is underway and plant start-up is expected in Q2 2023
- Origin 2 front-end design, construction planning, and financing progressing with update to be provided during Q2 earnings call in August 2023
- Origin continues developing commercialization pathways for higher-value applications for its intermediates CMF and HTC including FDCA and FDCA-based polymers. Additional patent filings within 5 new patent families including FDCA-related polymers that improve performance, HTC and the use of HTC in rubbers
- Origin's sustainable carbon black blends were shown to meet or exceed fossil-based N660 performance for tires and mechanical rubber goods

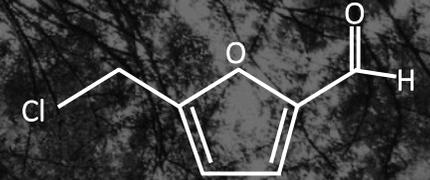
Maintains 2023 financial guidance

- The Company maintains its 2023 financial guidance of revenue of \$40 million to \$60 million and Adjusted EBITDA loss of \$50 million to \$60 million
- The Company reported Q1 revenue of \$1.7 million generated by JDAs and its supply chain activation program

1. Figures assume maximum offtake amounts and exercise of full capacity reservations.

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

>\$9.3Bn³

from a diverse mix of industries

Protected & Validated Technology

28 Patent Families⁴

Core technology protected in key countries

Cash on hand⁵

\$264 Mn

Origin expected to be fully financed until EBITDA positive with anticipated financing, grants, and potential strategic partnerships

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

2. Figures assume maximum offtake amounts and exercise of full capacity reservations.

3. As of February 23, 2023.

4. As of May 10, 2023.

5. As of March 31, 2023. Represents cash, cash equivalents, restricted cash, and marketable securities.

Source: Origin Materials.

Inflation Reduction Act (“IRA”) offers potential for incremental government incentives for the construction of Origin’s plants

Advanced Industrial Facilities Deployment Program (“AIFD”) expected to provide decisions at the end of the year

IRA – Section 48C Advanced Manufacturing Tax Credit

- The IRA is expected to significantly expand the Section 48C Tax Credit available for investments in manufacturing facilities for clean energy technologies
- Law provides \$10 billion for allocations and expands the scope of eligible projects to “projects that re-equip, expand, or establish an industrial or manufacturing facility”¹
- Origin is exploring several paths of eligibility in order to qualify for a discretionary tax credit for a significant portion of the plant’s capital, which could support Origin 2 and future plant financing

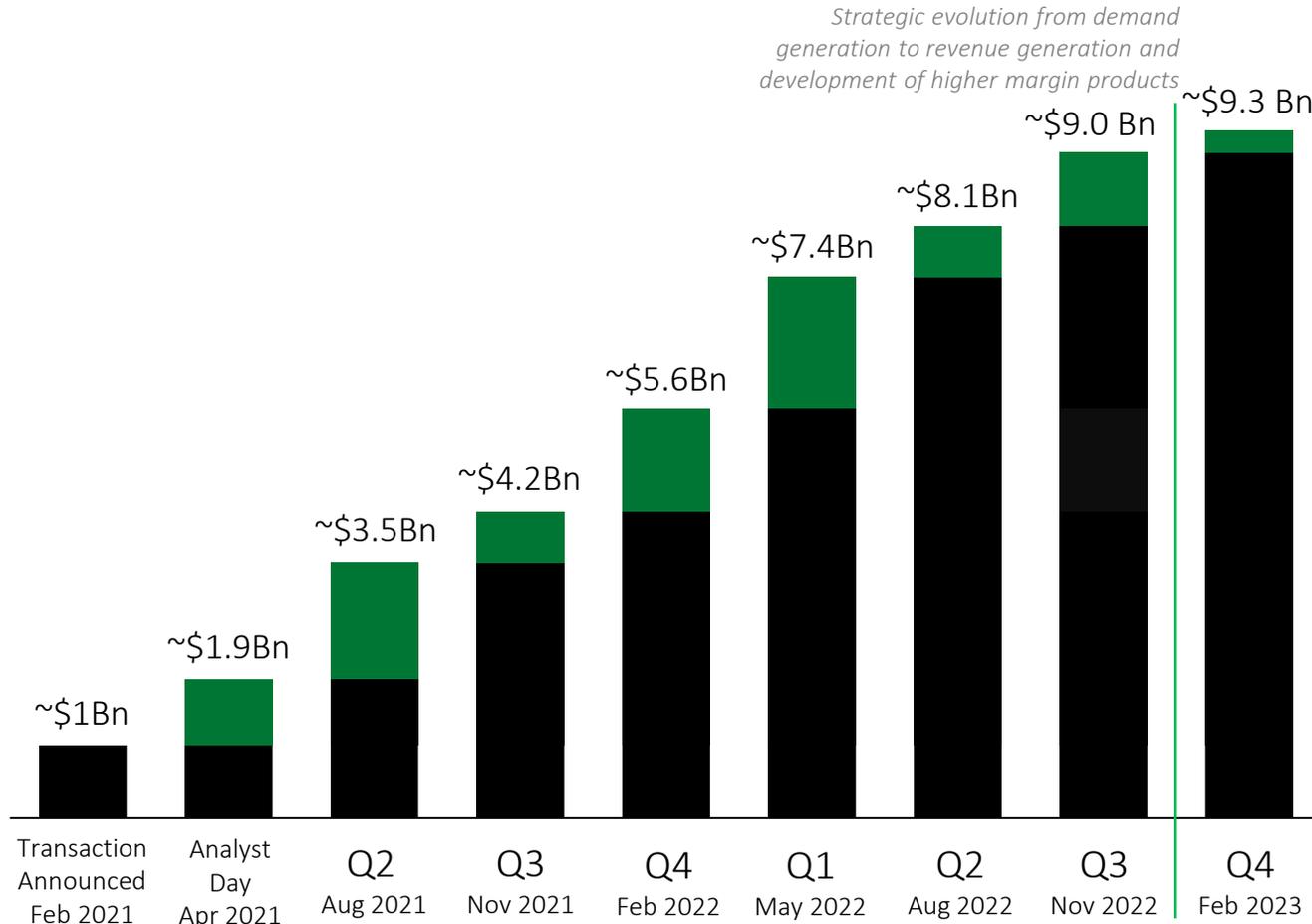
IRA – Advanced Industrial Facilities Deployment Program

- Department of Energy program expected to provide competitive funding to advanced industrial facilities aimed at reducing greenhouse gas emissions from historically energy-intensive industries
- \$5.8 billion of funding expected to be allocated for grants, rebates, direct loans, or cooperative agreements¹
- Origin optimistic that U.S. based capacity will qualify for competitive financing

Origin customer demand exceeds \$9.3Bn, a more than ninefold increase since announcement to go public in February 2021

Total demand consists of offtake agreements or capacity reservations¹

Customer Demand, \$Bn cumulative²



Select Origin Customers & Partners



1. Figures assume maximum offtake amounts and exercise of full capacity reservations. As of February 2023, Origin Materials' commercial strategy evolved from demand generation to revenue generation and the development of higher margin products, and as such the Company does not plan to provide quarterly updates to its total signed offtake agreements and capacity agreements but will provide updates as appropriate.

2. In the chart, green color denotes the incremental increase in customer demand for a given quarter.

Indorama Ventures Partnership



“Origin Materials and Indorama Ventures Announce a Strategic Partnership to Accelerate the Mass Production of Bio-Based Materials”

– May 9, 2023

- Indorama Ventures and Origin signed a strategic MOU to explore initiatives related to the rapid commercialization of low-carbon bio-based materials
- Indorama Ventures is the world’s largest producer of virgin and recycled PET resins with about 26,000 employees worldwide and 2022 revenue of \$18.7 billion
- Companies to explore converting an Indorama Ventures’ U.S. facility into bio-based materials plant
- Companies to produce samples for use in limited-volume product launches with high-profile brands
- Materials could potentially be used in packaging, textiles, films, and automotive applications and could include bio-PET, bio-PTA, FDCA, and co-polyesters that have an advantage over traditional PET plastic



Clockwise from top left: Illustrative facility, PET fiber, automobile, PET bottle preforms.
Source: www.indoramaventures.com

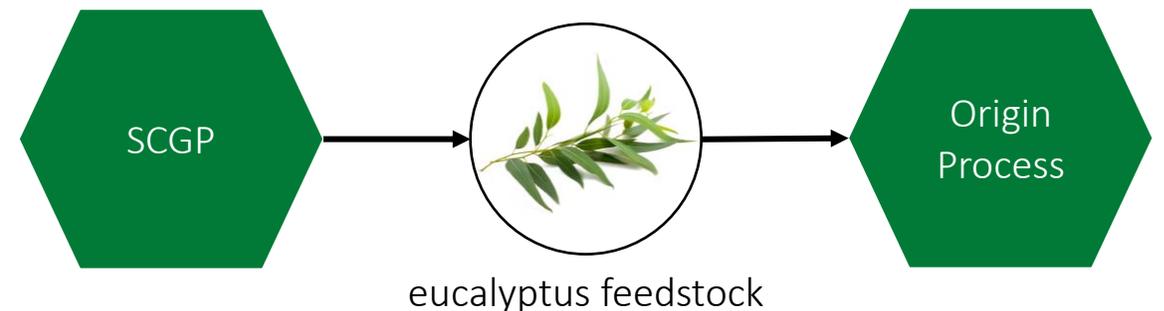
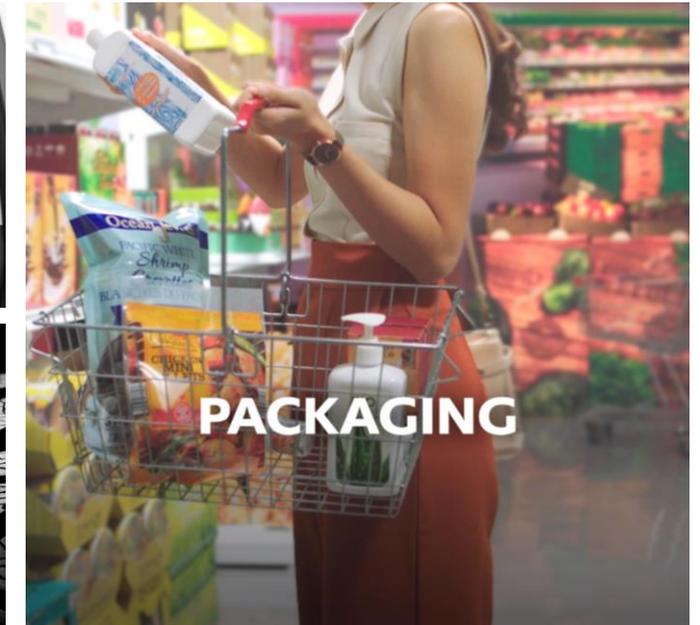
SCGP Partnership



“Origin Materials and SCGP Announce Strategic Partnership in Innovation and Sustainability to Explore Licensing Origin Technology for ASEAN-Based Plant”

– April 17, 2023

- SCG Packaging PLC (“SCGP”), a leading multinational consumer packaging solutions provider, signed a JDA with Origin Materials
- Opens pathways for further scaling Origin technology, including potentially through a global licensing strategy
- Targeting applications in food packaging, logistics, automotive, and construction
- Origin successfully processed and tested SCGP’s eucalyptus feedstock in its pilot facility, confirming similar yields to other sustainable wood residues that Origin has evaluated
- As a feedstock, eucalyptus offers several benefits including rapid growth, adaptability to diverse environments, and other properties useful for industry

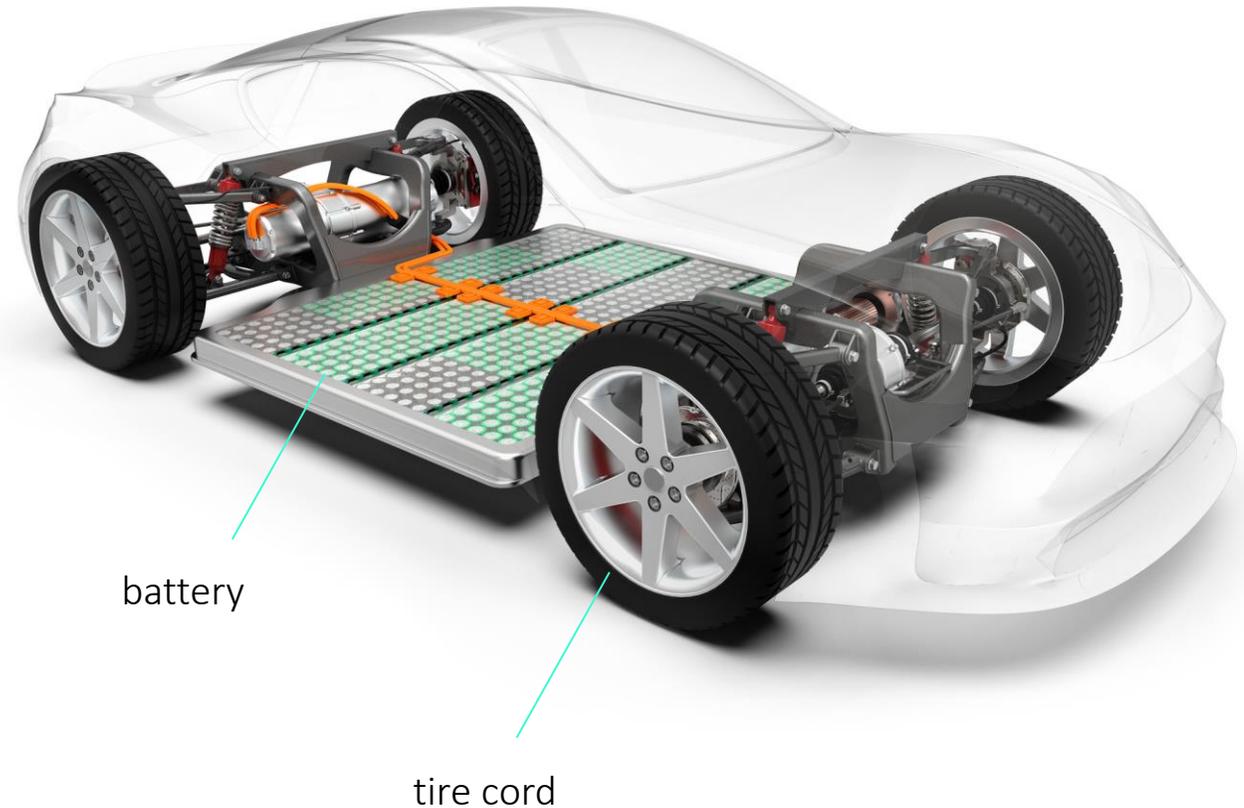


Hyosung Partnership

“Origin Materials and Hyosung Partner to Produce Batteries, Automotive Parts, and Apparel from Carbon-Negative Materials”

– March 22, 2023

- Hyosung Advanced Materials, a Korea-based industrial materials company, signed a multi-year capacity reservation agreement to purchase sustainable carbon-negative materials from Origin
- The materials include PET and a hybrid polymer PET/F (a blend of PET and FDCA) for use in tire cord applications, HTC for use in battery materials, as well as furanic derivatives for use in spandex applications in the apparel industry



Minafin Expanded Relationship

“Origin Materials and Minafin Group Launch Manufacturing Initiative for Origin’s First Commercial Plant”

– April 19, 2023

- Green Chemistry Division of Minafin Group, a global fine chemical company, to serve as high-value conversion and manufacturing partner for Origin 1, improving downstream supply chain for novel chemistry
- CMF (chloromethylfurfural) produced by Origin at Origin 1 will be delivered to Minafin, which will convert CMF into downstream intermediates and products
- Expands on the companies’ previously announced strategic partnership to industrialize sustainable chemicals
- Complementary technologies to grow value of bio-based supply chain including bio-based PET



Manufacturing initiative builds on the strengths of Origin’s patented technology platform, which turns the carbon found in sustainable wood residues into useful materials, and Minafin’s manufacturing capability, process know-how, supply chain strength, and deep expertise in furanic specialty products

Origin announced two new appointments to Board of Directors

Deep expertise in operations, strategy, corporate finance, and M&A across chemicals and materials science industries



Craig Rogerson

- Four decades of executive experience leading private and publicly held specialty chemical companies
- Chairman, President and CEO of Hexion, Inc., a leading global producer of adhesives and performance materials, from 2017 to 2023. Prior to being acquired for \$1.9 billion in 2022, Hexion had over \$2 billion in annual sales
- Chairman, President and CEO at Chemtura Corporation, a global developer, manufacturer and marketer of engineered industrial specialty chemicals, from 2008 to 2017. Prior to being acquired for \$2.5 billion in 2017, Chemtura generated \$1.7 billion in 2015 revenue



Tony Tripeny

- Over three decades of operational, strategy, and M&A experience with extensive knowledge of the manufacturing, technology, and materials science industries; background in international corporate finance
- 36-year career with Corning, Inc., a global leading innovator in materials science with more than \$10 billion in annual revenue. Held various progressive leadership roles in corporate accounting and finance, including Executive Vice President, Chief Financial Officer and Senior Vice President, Corporate Controller and Principal Accounting Officer
- Since 2022, served as a director at Mesa Laboratories, Inc., a global leader in the design and manufacturing of life science tools and critical quality control solutions

Origin 1 start-up expected in Q2 2023, in-line with prior guidance

Plant is mechanically complete with commissioning underway

- Commercial-scale plant expected to enable customers to qualify products and applications beyond PET and HTC fuel pellets; higher value products ultimately to be produced and sold at world scale from Origin 2, Origin 3, and beyond
- In addition to para-xylene and bio-PET, Origin is exploring or qualifying FDCA, epoxies and resins, surfactants, sustainable carbon black, bio-asphalt, fuel pellets, as well as biofuel and bio-solvents from an “oils and extractives” stream co-produced with CMF and HTC not included in previous plans
- Origin 1 will be operated to optimally fulfill customer demand around qualification and sampling



The superior performance of Origin's carbon black derives from HTC and the proprietary core chemical process by which Origin creates it (1 of 2)

HTC is derived from wood residues reacted in Origin's core process

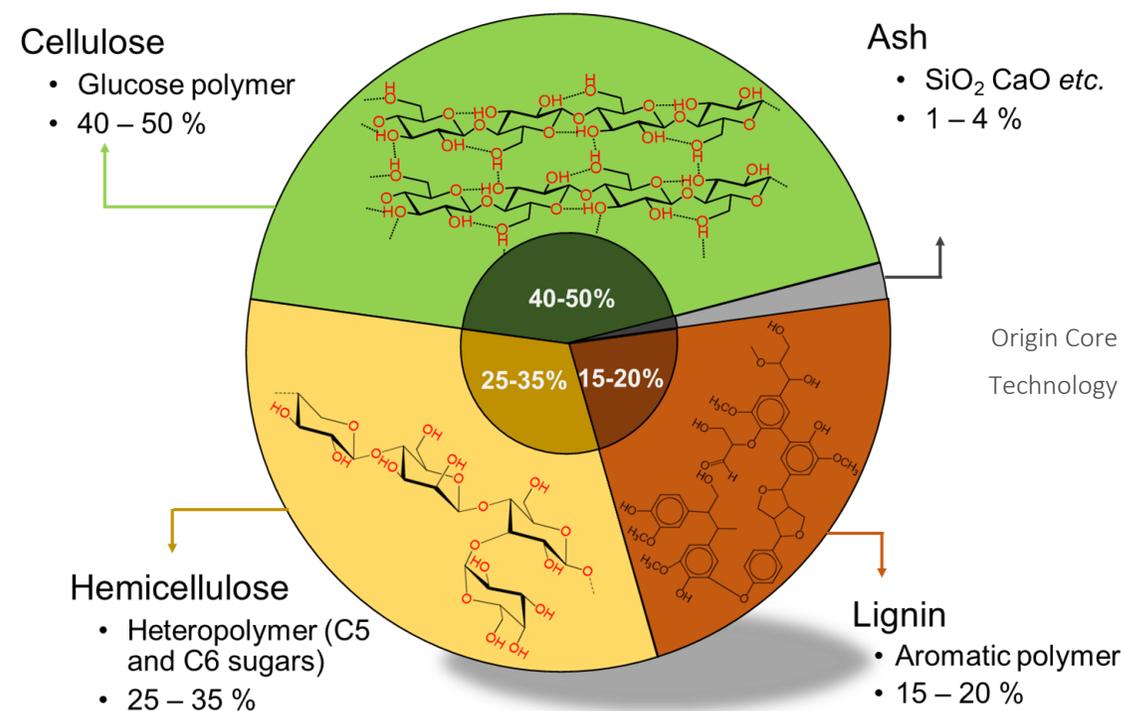
During conversion of biomass to HTC:

- Cellulose and components of hemicellulose convert to CMF
- Lignin and some degraded CMF form HTC

HTC is a unique material

- Resulting from the interaction of CMF and lignin in Origin's core process

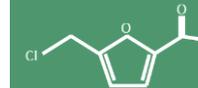
Wood residue biopolymers¹



Intermediates

“CMF”

5-Chloro-methyl-furfural



“HTC”

Hydrothermal Carbon

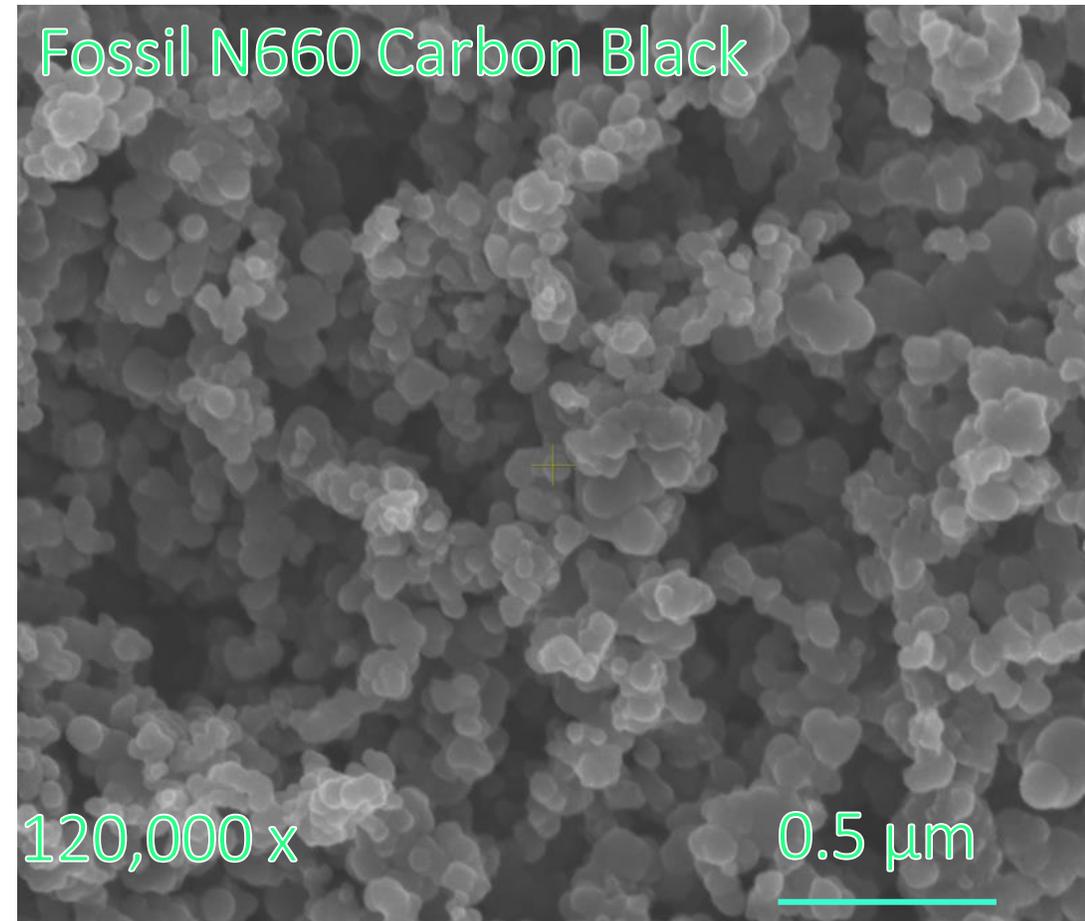
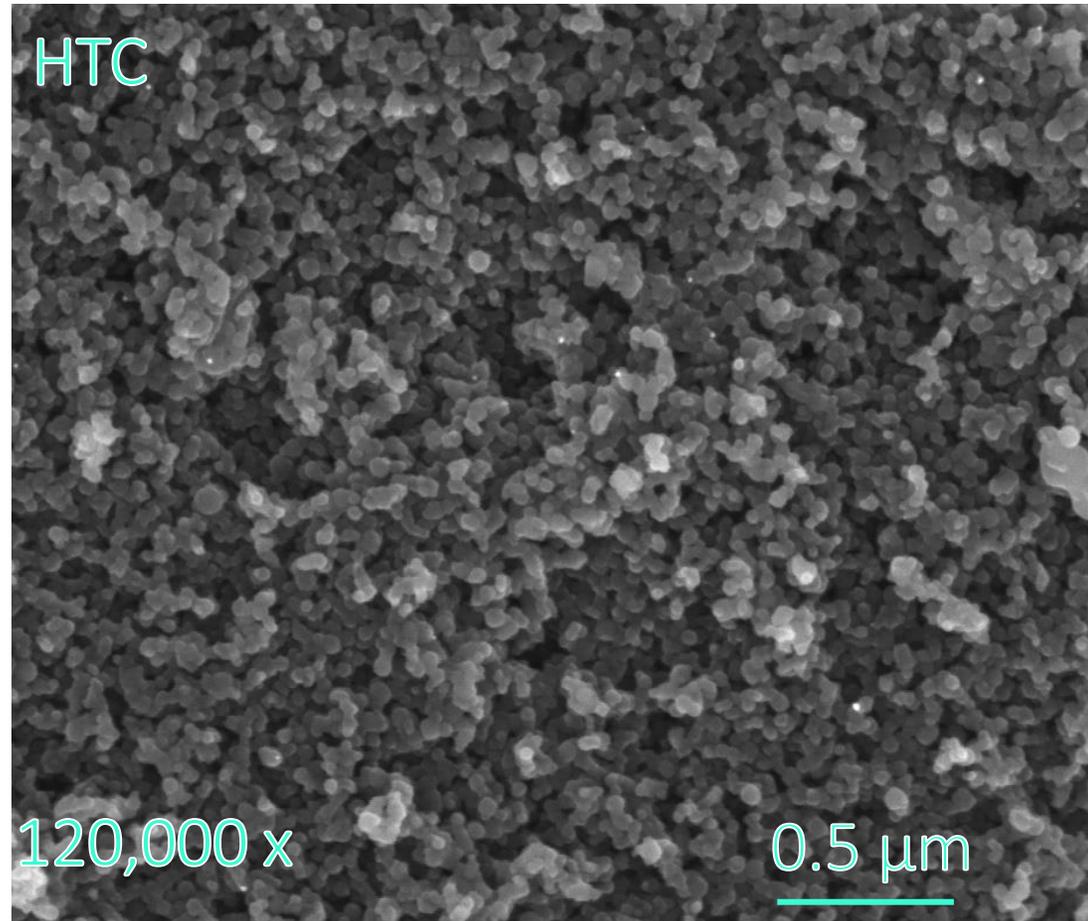
C

“Oils & Extractives”

1. Percentages given on mass basis.

The superior performance of Origin's carbon black derives from HTC and the proprietary core chemical process by which Origin creates it (2 of 2)

Carbon black derived from Origin's HTC is physically similar to fossil-based carbon black



HTC primary particles (left) form as “grapelike” aggregates during the conversion of lignocellulosic biomass to platform intermediates including CMF. The structure of these aggregates is complex and similar to N660 carbon black derived from oil (right).

Origin is making strong progress in carbon black development with demonstrated superiority in performance and sustainability (1 of 2)

“Origin Materials’ Sustainable Carbon Black Blends Meet or Exceed Fossil-Based N660 Performance for Tires and Mechanical Rubber Goods”

– March 30, 2023

- N660 is a widely used and technically demanding “gold standard” performance specification for automotive tires and mechanical rubber goods
- Bench-scale results validate Origin’s carbon black as high-performance bio-based tire filler which can be blended into mechanical rubber goods and automotive applications
- Compared with fossil-based N660 carbon black, Origin carbon black blends showed equivalent or improved performance

Origin’s Carbon Black Product Benefits

- Sustainable replacement for fossil-based carbon black
- Up to 100% bio-content with low carbon intensity
- Tunable characteristics include particle size, surface area and surface hydrophilicity/hydrophobicity
- No detectable polycyclic aromatic hydrocarbons, or PAHs
- Expected to provide stable pricing largely de-coupled from the petroleum supply chain, which is exposed to more volatility than supply chains based on sustainable wood residues
- Attractive alternative to reclaimed carbon black since it does not suffer the same performance limitations and can even exceed performance of fossil-based materials
- Production of Origin’s carbon black not expected to be affected by the same regulatory limitations in the United States as fossil-based carbon black
- Can achieve superior dispersion and tan delta, qualities which offer performance advantages in tires related to durability and fuel economy

Origin is making strong progress in carbon black development with demonstrated superiority in performance and sustainability (2 of 2)

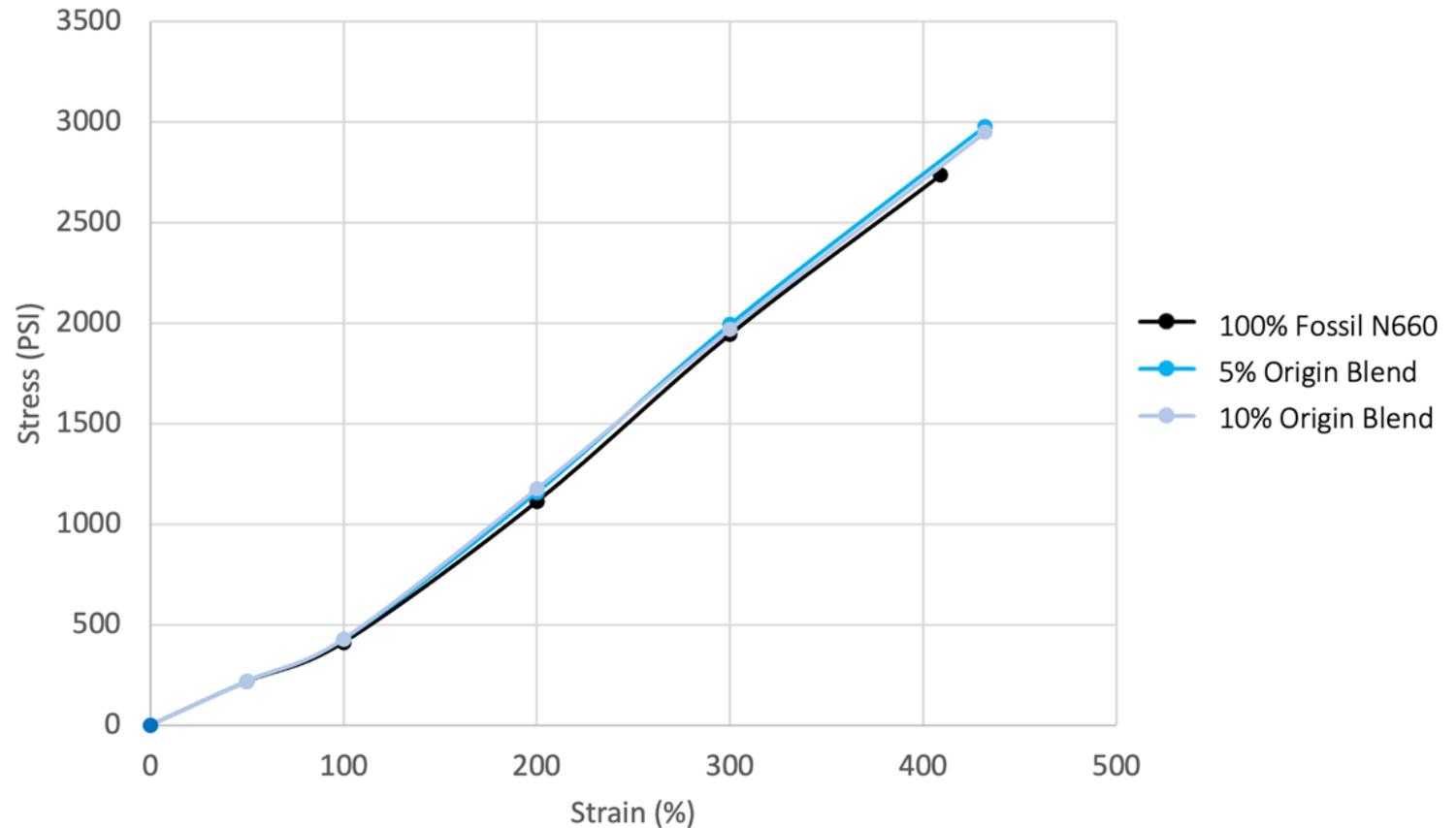
“Origin Materials’ Sustainable Carbon Black Blends Meet or Exceed Fossil-Based N660 Performance for Tires and Mechanical Rubber Goods”

– March 30, 2023

Technical Overview

- Rubber compounds containing up to 10% Origin carbon black blend showed equivalent or improved performance compared with traditional fossil-based N660 ASTM carbon black under stress-strain analysis, as shown at right
- % Origin carbon black expected to increase in future studies
- Compared with fossil-based carbon black, blends containing Origin’s carbon black could achieve superior dispersion and tan delta, qualities which offer performance advantages in tires related to durability and fuel economy

Stress vs Strain Curve – Origin Carbon Black Study



The Origin HTC leadership team has extensive technical, operational, and commercial expertise, with 130+ years combined experience



Bill Williams, PhD

Director of Process Development – Carbon Black

- Process development leader with expertise in reaction engineering and catalysis for 30+ years, 13 years in carbon black
- Formerly at Dupont, Birla Carbon, Cabot, Praxair



Ruairi O'Kane, PhD

Carbon Products Technical Director

- 15+ years at Henkel with technical leadership experience
- Expertise in adhesives, advanced materials, polymer solutions for aerospace and semiconductor markets



Ben Freireich, PhD

Technical Fellow

- 13+ years engineering science leadership experience
- Expertise in solids processing technology
- Co-author of Perry's Chemical Engineers' Handbook
- Director on AIChE chemical engineering technology operating council
- Formerly at Dow and PSRI



Paul Dornath, PhD

Staff Scientist

- HTC product development leader for 8+ years
- Expertise in ordered mesoporous zeolite and carbon catalysts
- Subject matter expert on HTC synthesis, morphology, and structure-property relationship



Himanshu Patel, PhD

Director of Product – HTC

- 10+ years at Birla Carbon, global growth and technical business development leader
- Expertise in polyester reaction engineering, rubber compounds, and specialty carbon black applications
- Formerly at Continental AG



Darryl Huntley

Director of Business Development – HTC

- Sales and marketing leader with expertise in carbon black for tire and rubber compounds, polyethylene and polypropylene resins for injection molding, blow molding and sheet applications
- Formerly at Continental Carbon Company, Formosa Plastics Corporation for 30+ years



Mark DiGiambattista

Product Stewardship and Regulatory Manager

- 15+ years of regulatory and product stewardship experience in medium to large publicly listed companies
- Former Regional Product Stewardship Manager at Hexcel Corporation; formerly at Terex Corporation, Occidental Petroleum Corporation



Q1 2023 financials in-line with previous outlook

Financial operating metrics for Q1 2023 are in-line with our previous outlook

- Net income was \$9.8 million for the first quarter compared to net income of \$7.3 million in the prior-year period
- With ramp up of employee hiring and operations in support of construction, product development and sales activities, Q1 2023 Adjusted EBITDA loss was \$9.7 million compared to a loss of \$6.5 million in the prior-year period¹

Origin 2 has received financing approval

- The Company continues to expect that Origin 2 can be fully funded from a combination of existing cash on hand, previously indicated traditional project financing, and potential strategic partnerships. In addition, Origin has an ongoing global technology licensing effort and an active governmental affairs team, therefore the Company anticipates strategic partnerships and federal incentives programs to play a meaningful role in the financing of Origin 2
- Origin 2 has received final approval from Louisiana State Bond Commission and preliminary approval from Louisiana Public Finance Authority for the issuance of up to \$1.5 billion of tax-exempt bonds, inclusive of previously announced expected \$400 million Private Activity Bond (“PAB”) allocation from the State of Louisiana, which could enable the financing of the debt of Origin 2 using entirely tax-exempt bonds
- Origin continues to work with leading financial institutions on other forms of traditional private financing and federal loan programs, including through the U.S.D.A and Department of Energy
- Origin is exploring several paths of eligibility for various Inflation Reduction Act programs and grants as the guidelines are finalized by the relevant agencies

Maintains 2023 financial guidance

- The Company maintains its 2023 financial guidance of revenue of \$40 million to \$60 million and Adjusted EBITDA loss of \$50 million to \$60 million
- The Company reported Q1 revenue of \$1.7 million generated by JDAs and its supply chain activation program

1. For a reconciliation of a non-GAAP figure to the applicable GAAP figure please see the table captioned 'Reconciliation of GAAP and Non-GAAP Results' set forth on slide 21.



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Appendix

Share count as of 3/31/2023

<u>Class</u>	<u>Outstanding Shares of Common Stock</u>
Total Shares Outstanding¹	138,767,991
Shares subject to forfeiture ¹	4,500,000
Total Shares Outstanding, including Shares subject to forfeiture¹	143,267,991
	<u>Shares Reserved for Future Issuance Pursuant to Potential Earnouts, Outstanding Warrants, and Options</u>
Public Warrants ²	24,149,960
Private Warrants ²	11,326,667
Legacy Origin Earnout Shares ³	25,000,000
Options and RSUs ^{4, 5}	17,098,060
Total Shares⁵	220,842,678

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 4,826,441 options with a weighted average strike price of \$0.17/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), 4,195,687 Restricted Stock Units, and 2,183,300 Performance Stock Units under which the maximum award can be up to 6,594,401 shares. 5. Excludes shares available for future issuance pursuant to our equity incentive plan and employee stock purchase plan.

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 income, (iv) change in fair value of derivative, (v) change in fair value of warrants liability, (vi) change in fair value of earnout liability, (vii) other income, net.

(in thousands)	Three months ended March 31,	
	2023	2022
Net income	\$ 9,769	\$ 7,346
Stock based compensation	2,246	918
Depreciation and amortization	288	148
Interest income	(3,014)	(1,833)
Change in fair value of derivative	(760)	834
Change in fair value of warrants liability	(6,766)	1,774
Change in fair value of earnout liability	(12,872)	(15,227)
Other income, net	1,368	(450)
Adjusted EBITDA	<u>\$ (9,741)</u>	<u>\$ (6,490)</u>



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