

ANNUAL REPORT 2022

danimer 
scientific
A Biotechnology Company

CORPORATE INFORMATION

Board of Directors

Stephen E. Croskrey
Chairman

John Amboian
Lead Independent Director

Philip Gregory Calhoun

Cynthia Cohen

Richard Hendrix

Gregory Hunt

Allison Leopold Tilley

Dr. Isao Noda

Stuart W. Pratt

Management

Stephen E. Croskrey
Chief Executive Officer

Michael A. Hajost
Chief Financial Officer

Michael Smith
Chief Operating Officer

Scott Tuten
Chief Marketing and Sustainability Officer

Phillip Van Trump
Chief Science and Technology Officer

ANNUAL MEETING

The Annual Meeting of Stockholders will be held on Thursday, June 1, 2023, at 10:00 a.m., Eastern Time, in a virtual-only meeting format via live webcast.

Detailed information about the meeting and detailed instructions on how to participate in this year's virtual meeting are contained in the Notice of Annual Meeting and Proxy Statement sent with a copy of this Annual Report.

STOCKHOLDER INFORMATION

Headquarters

Danimer Scientific, Inc.
140 Industrial Blvd.
Bainbridge, GA 39817
(229) 243-7075

Investor Relations Contact

James Palcynski
ir@danimer.com
(415) 876-8429

Media Contact

Anthony Priwer
apriwer@daltonagency.com
(615) 515-4891

Securities Listing

The Company's Class A common stock is listed on the New York Stock Exchange under the symbol DNMR.

Registrar and Transfer Agent

Continental Stock Transfer
and Trust Company
1 State Street, 30th Floor
New York, NY 10004

Independent Accountants

KPMG LLP
303 Peachtree Street NE
Suite 2000
Atlanta, GA 30308

Legal Counsel

Kane Kessler, P.C.
600 Third Avenue, 35th Floor
New York, NY 10016

LETTER FROM THE CHAIRMAN

Fellow Shareholders,

2022 was an important year of progress for Danimer along several dimensions. At a high level, we made progress in each area of our business, advancing our capabilities in sales, customer service, production, executive management, structural finance, and research and development. The foundation we have built for growth is solid, and we are positioned to maximize our opportunities in 2023 and 2024. We believe that the next several quarters may ultimately be the most important time period in the history and growth of the Company.

Our sales efforts have led to increased engagement with new customers and deeper relationships with existing customers. The pace, seriousness, scale and urgency of new business conversations we have with customers is increasing. We grew our PHA business by 34% for the full year despite global pressures related to supply chain management and inflation. Visibility into the demand for these specific and highly engineered resins, both near term and long into the future, has improved. Our focus on supporting the sustainability commitment of strong, global brands in the quick service restaurant channel has been successful. We are now working toward growth with five of the top 10 global chains and are also enthusiastic to have deepened our relationship with Havi, the most important supply chain management company for that channel. Our combination of PHA resins for straws, coatings for paper cups, and cutlery is a powerful assortment for this market.

We substantially increased our manufacturing capacity during 2022, having completed the construction and commissioning of our Kentucky manufacturing facility to serve the growing near-term demand from our customers. We can now, with only an increment of additional staffing, reach our design capacity of 65 million pounds of finished, PHA-based resin. This is more than triple our capacity of just 20 million pounds a year ago. The commissioning process validated our ability to run smoothly at high levels of quality and efficiency. In particular, the fermentation yields we have achieved are significantly stronger than expected, which we expect to lead to savings of both cost and capital for future facilities.

We are seeing the development of far more demand than can be served by our Kentucky facility and, with \$173 million invested thus far, we continue to move forward in standing up our greenfield manufacturing facility in Bainbridge, Georgia. This facility is designed to produce 125 million pounds of finished, PHA-based resin and represents a nearly 200 percent increase in total capacity for Danimer. We have worked extensively throughout the year to secure funding to complete this project through the Department of Energy's loan guarantee program. After submitting the Part I application near the beginning of 2022, we were invited by the DOE to submit a more extensive Part II application, and did so in the first quarter of 2023. We look forward to the next steps of the process, which we hope will be DOE acceptance of our application and an invitation into the subsequent underwriting and due diligence phases. We remain optimistic that we'll ultimately secure funding through this program.

LETTER FROM THE CHAIRMAN (CONT.)

We are also increasingly excited for what we regard as a revolutionary pathway to PHA production that will lower capital and production costs and open the door to new, large markets. We have received and installed all major process equipment for, and begun commissioning of a demonstration plant that, instead of fermentation, utilizes a highly efficient catalytic process to manufacture PHA. We have used scaled-down versions of standard processing equipment to produce a form of PHA we call Rinnovo, a low-cost PHA with unique properties that we can use in our blended materials, in addition to or instead of Nodax. This new facility will produce enough material for customer tests and trials and showcases a working proof of concept for a commercial-scale plant.

We are excited by the continued pace of progress in our research and development efforts. Our focus remains on the creation of specific blended resins based on the Nodax PHA polymer that we manufacture in our Kentucky facility. Our ability to offer customers highly engineered solutions is the result of decades of material science, an important and valuable competitive advantage. Our resins meet stringent global standards for biodegradability for home compost and marine environments, run on our customers' existing process equipment, and perform well in their end-use applications. As the only company in the world with a commercially scaled polymer-based solution with these performance characteristics, we believe we are uniquely positioned to begin to disrupt the entrenched position of polluting, petroleum-based plastics, category by category.

We believe this disruption will be spurred on by consumers who are increasingly serious about pushing change on sustainability issues, particularly with respect to the unnecessary pollution of our marine environments. Our customers know that consumers, particularly younger adults with growing purchasing power, are educated about the products and companies they patronize. Governments around the world know that their citizens are increasingly demanding regulations that mandate the use of ecologically responsible materials. This past year, I was honored to represent Danimer at the White House-hosted summit on biotechnology and biomanufacturing and was pleased to see the strong, clear support for what we are doing and the recognition of the unique value that PHA-based materials have to offer.

The entire team and I share a conviction that 2023 is going to be a watershed year in the history of the Company. There is momentum in our operations, momentum in the biomaterials category, and momentum in sustainability as a true mandate for responsible brands and businesses around the globe. We have entered 2023 with strong operational capabilities, the advantages of decades of research and development, the necessary financial strength for growth, and a dedicated team of people who can translate all those things into the building of an enduring and important business. We are dedicated to serving our customers with great solutions and great execution, to providing our shareholders with solid returns, and to helping our global community address some of the most difficult and serious challenges that impact our planet.

Sincerely,
Stephen E. Croskrey
Chairman and Chief Executive Officer



**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE
TRANSITION PERIOD FROM TO

Commission File Number 001-39280

DANIMER SCIENTIFIC, INC.

(Exact name of Registrant as specified in its Charter)

Delaware

(State or other jurisdiction of incorporation or organization)

140 Industrial Boulevard

Bainbridge, GA

(Address of principal executive offices)

84-1924518

(I.R.S. Employer Identification No.)

39817

(Zip Code)

Registrant's telephone number, including area code: (229) 243-7075

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, \$0.0001 par value per share	DNMR	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes No

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

At June 30, 2022, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was approximately \$461 million based on the closing sales price of \$4.56 as reported on The New York Stock Exchange on June 30, 2022.

At March 28, 2023, there were 101,938,376 outstanding shares of the registrant's \$0.0001 par value Class A Common Stock.

DOCUMENTS INCORPORATED BY REFERENCE: Applicable portions of the Proxy Statement for the upcoming 2023 Annual Meeting of Stockholders of the Company are incorporated by reference into Part III of this Form 10-K.

Auditor Firm Id: 185

Auditor Name: KPMG LLP

Auditor Location: Atlanta, Georgia

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PART I

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Report") of Danimer Scientific, Inc. contains "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Except where the context otherwise requires or where otherwise indicated, the terms the "Company," "Danimer," "we," "us," and "our," refer to the consolidated business of Danimer Scientific, Inc. and its consolidated subsidiaries. All statements in this Report, other than statements of historical fact, are forward-looking statements. These forward-looking statements are based on management's current expectations, assumptions, hopes, beliefs, intentions, and strategies regarding future events and are based on currently available information as to the outcome and timing of future events. Forward-looking statements may contain words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "should," "would," "could," "plan," "predict," "potential," "seem," "seek," "future," "outlook," the negative of such terms and other similar expressions, which are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. The Company cautions that these forward-looking statements are subject to all of the risks and uncertainties, most of which are difficult to predict and many of which are beyond the control of the Company, incident to its business.

Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. These forward-looking statements are based on information available as of the date of this Report (or, in the case of forward-looking statements incorporated herein by reference, if any, as of the date of the applicable filed document), and any accompanying supplement, and current expectations, forecasts and assumptions, and involve a number of risks and uncertainties. Accordingly, forward-looking statements should not be relied upon as representing the Company's views as of any subsequent date, and the Company does not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

As a result of a number of known and unknown risks and uncertainties, our actual results or performance may be materially different from those expressed or implied by these forward-looking statements. Some factors that could cause actual results to differ include:

- *our ability to recognize the anticipated benefits of business combinations, which may be affected by, among other things, competition, and our ability to grow and manage growth profitably following business combinations;*
- *costs related to business combinations;*
- *changes in applicable laws or regulations;*
- *the outcome of any legal proceedings against us;*
- *the effect of the COVID-19 pandemic on our business;*
- *our ability to execute our business model, including, among other things, market acceptance of our planned products and services and construction delays in connection with the expansion of our facilities;*
- *our ability to raise capital;*
- *the ongoing conflict in Ukraine;*
- *the possibility that we may be adversely affected by other economic, business, and/or competitive factors; and,*
- *other risks and uncertainties set forth in the section entitled "Risk Factors" of this Report, which is incorporated herein by reference.*

Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in this Report, specifically the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Other risks and uncertainties are and will be disclosed in our prior and future SEC filings. The following information should be read in conjunction with the Consolidated Financial Statements and related notes included in this Report.

AVAILABLE INFORMATION

We are subject to the reporting and information requirements of the Securities Exchange Act of 1934, as amended, and as a result are obligated to file annual, quarterly, and current reports, proxy statements, and other information with the SEC. We make these filings available free of charge on our website (<http://www.danimerscientific.com>) as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. The foregoing information regarding content on our website is for convenience only and shall not be deemed to be incorporated by reference into this Report nor filed with the SEC. In addition, the SEC maintains a website (<http://www.sec.gov>) that contains our annual, quarterly, and current reports, proxy and information statements, and other information we electronically file with, or furnish to, the SEC.

ITEM 1. BUSINESS

The Company (formerly Live Oak Acquisition Corp.) was incorporated in Delaware on May 24, 2019 as a special purpose acquisition company, or SPAC, formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, recapitalization, reorganization, or similar business combination with one or more businesses. Live Oak completed its initial public offering in May 2020. On December 29, 2020 (“Closing Date”), the Company consummated a business combination (“Business Combination”), pursuant to which the Company acquired all of the outstanding capital stock of Meredian Holdings Group, Inc., a Delaware corporation (“Meredian Holdings Group” or “MHG”) through the exchange of MHG common stock for Live Oak Class A common stock. The Business Combination was effected through the merger of Green Merger Corp., a wholly owned subsidiary of Live Oak, with and into MHG, with MHG surviving the merger as a wholly owned subsidiary of Live Oak.

In connection with the closing of the Business Combination, the Company changed its name from Live Oak Acquisition Corp. to Danimer Scientific, Inc.

The following description of our business describes the business historically operated by Meredian Holdings Group and its subsidiaries under the “Danimer Scientific” name as an independent enterprise prior to the Business Combination (“Legacy Danimer”) and which will be operated by the Company after the Business Combination.

Our principal operating subsidiaries are Meredian, Inc., Danimer Scientific, L.L.C, Danimer Scientific Kentucky, Inc., and Novomer, Inc.

Overview

We are a performance polymer company specializing in bioplastic replacements for traditional petroleum-based plastics. Applications for biopolymers include additives, aqueous coatings, fibers, filaments, films, thermoforming, and injection-molded articles. We bring together innovative technologies to deliver biodegradable bioplastic materials to global consumer product companies. We believe that we are the only commercial company in the bioplastics market to combine the production of a base polymer along with the reactive extrusion capacity in order to give customers a “drop-in” replacement for a wide variety of petroleum-based plastics.

We have core competencies in polymer formulation and application development, fermentation process engineering, thermocatalysis, chemical engineering and polymer science. In addition, we have created an extensive intellectual property portfolio to protect our innovations that together with our technology, serves as a valuable foundation for our business and for future industry collaborations. We primarily market our products to consumer packaging brand owners, converters and manufacturers in the plastics industry seeking to address environmental, public health, renewability, composting and biodegradability concerns arising from customer perceptions and expectations, government regulations, or other reasons.

Our fermentation process uses sustainably-sourced canola oil. Our proprietary extraction and extrusion processes are cost competitive and leave almost no carbon footprint. Our customized formulations enable us to team up with other makers of biobased products to create an even wider range of goods. We anticipate our scalable production capacity and modular manufacturing model will soon enable us to serve an increasingly large customer base.

We believe we are a leader in the bioplastics industry as evidenced by:

- Our over 18-year corporate history;
- Our combined portfolio of over 480 patents and pending patent applications worldwide in more than 20 countries for a range of manufacturing processes and biopolymer formulations;
- Our collaboration, development and supply agreements with some of the largest consumer packaged goods companies; and
- Numerous awards won, including PLASTICS Industry Association's 2018 and 2020 Innovation in Bioplastics award.

Our Technologies

PHA-based Resins: Polyhydroxyalkanoate ("PHA") is a naturally occurring bioplastic that effectively biodegrades in both anaerobic environments, such as a waste treatment facility, and aerobic environments, such as industrial compost, home compost, soil, fresh water and seawater. PHA will degrade in any environment in which microbes or fungi are present, without the presence of additional heat or moisture. This ease of degradation, as compared with industrial composting facilities, creates numerous options for companies that use plastics as part of their business.

We currently produce PHA in a fermentation process in which bacteria consume vegetable oil and produce PHA within their cell membranes as energy reserves. We harvest the PHA from the bacteria, then purify and filter the bioplastic before forming the non-formulated ("neat") PHA into pellets, which we combine with other inputs using a reactive extrusion process to manufacture formulated finished products with a diverse array of properties. We sell this neat PHA under our proprietary Nodax® brand name.

PHAs are also desirable as a biodegradable replacement for petroleum-based plastics since converters (manufacturers that turn plastic resin into finished products) do not have to purchase new equipment to switch to our material. Utilizing PHA as a base resin significantly expands the number of potential applications for bioplastics in the industry.

PLA-based Resins: Polylactic acid ("PLA") is made from dextrose derived from corn, sugar beets and sugar cane, among others. It is "industrially compostable" as per ASTM D6400 standards, which require a plastic to aerobically compost in a municipal industrial facility within 180 days. PLA requires additional heat and moisture to begin degrading by hydrolysis, which is why it is certified for industrial composting only.

Since 2004, we have been producing proprietary plastics using PLA as a base resin. We purchase neat PLA and formulate it into bioplastic applications by leveraging the expertise of our chemists and our proprietary reactive extrusion process. Our formulated PLA-based products allow many companies to use renewable and compostable plastics to meet their customers' growing sustainability needs. We are a pioneer in bioplastics technology, demonstrated by early successes such as creating a bioplastic suitable for coating disposable paper cups to withstand the temperatures of hot liquids such as coffee. We have two primary manufacturing platforms: reactive extrusion and polymer synthesis. In reactive extrusion, new polymers are made by combining PLA with other plant-based materials, minerals, or other inputs to be able to meet the needs of customers that cannot use non-formulated neat PLA. In polymer synthesis, new proprietary polymers are made in reactors (vertical tanks with ability to control pressure, heat, agitation, pH, etc.) and then pelletized. Our PLA-based biopolymers are formulated to meet the compostability requirements for ASTM International and European (EN) standards.

Rinnovo: Following the 2021 acquisition of Novomer, Inc. (incorporated into our business as Danimer Catalytic Technologies), we also have the technology to produce a type of PHA, specifically poly(3-hydroxypropionate) ("p3HP"), through a proprietary thermal catalytic conversion process at a lower cost than our fermentation process. We also refer to p3HP by its brand name, Rinnovo®. We believe that this technology will enhance the strength of product applications we develop due to the complementary nature of Rinnovo when combined with Nodax and enable us to increase the expected overall volume of finished product we will be able to deliver, all while significantly lowering our production costs and capital expenditure per pound produced.

The Plastics Market and Competitive Landscape

The plastics market is large with many established players. The market has grown around the chemical processing of oil and natural gas and is concentrated in the conventional, non-biodegradable petroleum-based segment.

Established companies in this segment include The Dow Chemical Company, E.I. DuPont de Nemours and Company, BASF Corporation, INEOS USA LLC, LyondellBasell Industries N.V., Saudi Basic Industries Corporation and

Mitsubishi Chemical Corporation, among many others. The price of conventional petroleum-based plastic is volatile, as it is dependent on petroleum as a key manufacturing input. In addition, the non-biodegradability of conventional petroleum-based plastics makes them persistent in and harmful to the environment and creates significant waste.

Competitive companies that produce bioplastics include Kaneka Corporation, which produces 3-hydroxybutyrate-co-3-hydroxyhexanoate, Novamont S.p.A., which produces polybutylene adipate terephthalate and CJ CheilJedang Corporation.

Our Nodax-based biopolymers offer a broad range of properties and processing options and can address a large portion of the opportunities for environmentally attractive yet functionally equivalent alternatives to conventional petroleum-based plastics. Unlike PLA and most starch-based composite biodegradables, PHA biopolymers can:

- biodegrade in natural soil and water environments, including the marine environment;
- remain functional through a wide range of temperatures; and
- withstand everyday use without breaking down.

Market Opportunity

Globally, over 800 billion pounds of plastic are produced each year. We believe that both PHA and PLA are excellent replacements for commercial plastics created with synthetic polymers derived from petroleum. We believe that PHA is a competitive replacement for polypropylene, polyethylene, polystyrene, and polyethylene terephthalate plastics. These plastics represent over 63% of traditional petroleum-based plastic worldwide, so we believe there is potential for PHAs to replace over 500 billion pounds of plastic applications annually.

Bioplastics are a key segment of the plastics industry and provide renewably-sourced products, which are compostable or biodegradable replacements for traditional petroleum-based plastics. Bioplastics are used in a wide range of applications, including packaging, adhesives, food additives, food service items and many others. The bioplastics industry is diverse and rapidly evolving. As companies continue to innovate new bioplastic products to meet existing and future customer needs, we expect the industry to expand substantially.

Environmental: Opportunities arising from the plastics industry’s negative environmental impacts include a demand for an alternative of more products and packaging using sustainable, renewable, and non-petroleum resources. Additionally, we believe there is heightened demand for biodegradable and compostable materials, as well as materials that facilitate greater safety for the public and the environment. A 2021 global sustainability study by Simon Kucher found 85% of consumers in global markets have shifted their purchase behaviors toward sustainability. In light of this sentiment, companies are looking for ways to divert landfill waste and environmental waste with the use of bioplastics. With the “end of life” scenarios that bioplastics provide, these companies are now testing new materials to be more proactive in reducing the global pollution problem.

Public Health: Manufacturers of products that are used for food packaging or food services may place priority on the development of bioplastics that eliminate the potentially negative health effects of petroleum-based plastics. While not yet conclusive, some scientific research suggests that polystyrene, polyvinyl chloride, polyethylene, and many other traditional plastics may be linked to certain cancers, endocrine disruptions, digestive dysfunctions, impaired immune function, and other serious health issues. We believe that this perception of traditional plastics, especially in food contact applications, is driving numerous product manufacturers toward the use of non-petroleum-based plastics.

Renewability: Some manufacturers place a greater emphasis on renewability rather than biodegradability or compostability of materials. In Europe, we believe many manufacturers place higher priority on renewability because of consumer perceptions and governmental regulations. While our use of canola oil as a feedstock instead of petroleum is an advantage in terms of renewability, we currently focus on biodegradability in the U.S. market.

Certification: The certification of materials in the bioplastics industry is based upon third-party standards that establish criteria for labeling materials and products. Certifications are important to brand owners and consumers as they give assurance that materials have been rigorously tested and vetted. As certifications are achieved for our products, we and our customers are authorized to utilize labels indicating the bioplastic meets certification guidelines, which we believe give consumers greater confidence in our products.

Business Strategy

Our goal is to build a commercially successful bioplastic manufacturing business, with attractive margins, based on the unique properties of our PHA and PLA biopolymers and our application development expertise. To achieve this goal, we are developing and commercializing biopolymers in a range of applications, including films, straws and containers. We believe this will provide an attractive base of commercial opportunities for Danimer, creating value for our business and our customers and generating leading intellectual property positions in the field.

Our strategy consists of six mutually supporting elements:

Expand Capacity to Achieve Scale: In order to reach our goals, we must be able to produce our products on a large scale. This will initially be accomplished by organic capacity growth. This includes the recent completion of the Phase II expansion at our Winchester, Kentucky Facility, and construction of a new PHA plant in Bainbridge, Georgia, as well as a Rinnovo pilot plant and the development of plans for a commercial Rinnovo plant. In addition, we have entered into a third-party licensing agreement to expand our effective capacity and reach additional markets, and we will continue to explore licensing and manufacturing agreements.

Lead with Innovation to Address a Broad Range of Customer Needs: We will continue to leverage our core competencies of polymer formulation and application development to increase the commercial uses for our products. This will include seeking to increase research and development contracts with global consumer products companies and additional opportunities for technology licensing.

Grow Customer Partnerships and Product Volume Commitments: We will continue to negotiate development and supply agreements with global blue-chip customers to secure demand for future capacity expansions and de-risk our capital spend.

Secure Cost-Effective Inputs: Our key manufacturing inputs are commodity products, including canola oil as the primary feedstock for our PHA fermentation process, and we seek to secure these inputs at reasonable prices through long-term agreements and partnership arrangements to ensure we have adequate, cost-effective volumes to support our production requirements. We also continue to explore the viability of alternative feedstocks to improve our flexibility to pursue lower-cost alternatives that may arise.

Attain Favorable Unit Economics to Enhance Margins: To drive competitive pricing and margin improvement, we seek to reduce our unit production costs by increasing our capacity utilization across our fixed cost base, blending in larger amounts of lower cost input materials, such as Rinnovo, and developing more cost-effective manufacturing methods.

Enhance Team Capabilities to Support Growth: As a technology-focused company, we continually seek to enhance the knowledge and capabilities of our staff and improve our processes to enhance productivity as our business grows in size and complexity. To this end, we have expanded and broadened the functional skill set of our leadership team and continue to seek to attract and retain scientists and engineers that can build on the foundational research and development work we've accomplished to date.

Our Products and Services

We offer the following products and services.

PHA-based Resins: We sell Nodax-based resins for use in a wide variety of plastic applications including films, straws and food containers. They are 100% bio-based and renewably sourced.

Nodax has achieved six TUV AUSTRIA certifications: OK compost INDUSTRIAL, OK compost Home, OK biodegradable SOIL, OK biodegradable Water, OK biodegradable MARINE, and OK biobased. Our Nodax-based biopolymers are formulated to meet the biodegradability requirements for ASTM International and European (EN) standards.

Nodax is also approved for food contact by the U.S. Food and Drug Administration ("FDA") and other authorities.

PLA-based Resins: PLA in neat form has limited functionality, but when we combine PLA with other plant-based chemicals and minerals through our reactive extrusion process, we can improve PLA-based products' processability, impact strength, heat tolerance and numerous other attributes to meet customer specifications for a wide range of applications to support petroleum-based plastic replacement. Our ability to formulate PLA in this manner enables us to acquire customers that neat PLA producers cannot.

Research and Development: We have a number of PHA R&D contracts with global consumer products companies, including Bacardi and Mars Wrigley. We collaborate with the R&D staff of each customer on products that are tailored for each customer's specific applications.

Tolling: We contract with customers to use our existing production facilities and expertise to help customers meet complex raw material opportunities. In 2015, we started making our production facilities and expertise available to tolling customers. There are many companies that toll manufacture in the U.S. for products that are large volumes at low prices.

Customers and Product Applications

We believe we are well-positioned to capture market share with our streamlined and flexible development process. We possess world-class research and development capabilities for new products. Since the inception and commercialization of our first products, a significant portion of our revenues have been generated from the sale of materials utilized in single-use food service articles. While we expect single-use food service articles to remain a significant component of our revenue, we continue to develop new products for many different applications; therefore, our client base is changing along with our product mix.

In 2022, we had two customers that each individually accounted for more than 10% of revenue and collectively represented 40% of total revenue. In 2021, we had two customers that each individually accounted for more than 10% of revenue and collectively represented 35% of total revenue.

PHA Products: We have successfully executed multiple contracts for the development and production of Nodax-based resins. Some of our current customers and their product applications using PHA-based resins are below:

- PepsiCo — In December 2016, we and PepsiCo, Inc. entered into a joint development agreement that provides for the development of our biodegradable film resins to meet the packaging requirements of PepsiCo's global food and beverage business, including compostable films to be used in Frito Lay chip bags.
- Mars Wrigley — In March 2021, we and Mars, Incorporated ("Mars Wrigley") signed an extensive R&D contract to work on films for their candy/food packaging. Mars Wrigley expects to launch a home compostable packaging for their Skittles brand in 2023.
- Bacardi — In October 2020, we and Bacardi Limited entered into an agreement with the goal to eliminate 3,000 annual tons of petrochemical plastic currently produced by Bacardi. The 100% biodegradable bottle under development could replace 80 million plastic bottles per year, as Bacardi's goal is to be petrochemical plastic free by 2030.
- Genpak — In November 2019, we and Genpak, LLC entered into a multi-year agreement under which we will deliver biodegradable resins that Genpak will use exclusively for the manufacture of its new GenZero™ line of food packaging products. Genpak's line of foodservice items are designed for a wide range of applications, including to-go hinged food containers, plates, bowls, and platters, serving trays and two-piece food containers. We understand that Genpak plans to launch Nodax-based home compostable take-out containers by the end of 2023.
- WinCup — In September 2019, WinCup Plastics, Inc., a leading manufacturer of disposable foodservice to-go-ware, announced the launching of phade®, a new line of straws and stirrers made from Nodax-based resins. We and WinCup have entered into a commercial supply contract for PHA currently being produced in our Kentucky Facility.
- UrthPact — In October 2019, we and UrthPact, LLC, a long-time customer of ours for PLA-based resins for use in single-serve coffee pods, entered into an agreement providing for the Nodax-based resins for the manufacture of straws. In addition, UrthPact also signed a contract with us to produce PHA-based resin for single serve coffee pods.

- Eagle Beverage and Accessory Products (“Eagle Beverage”) — In September 2020, Eagle Beverage, a leading manufacturer of drinking straws, signed a commercial supply contract with us to purchase straw resin. In May 2021, Danimer and Eagle Beverage signed an amendment to the supply contract for additional volumes. Their customers include large brands within the food and beverage industry.
- Columbia Packaging Group (“CPG”) — In November 2019, CPG, a large producer of flexible films signed a supply agreement for the purchase of our PHA film resins. In September 2020, CPG added additional volume for our PHA film resins. Due to this early success and our partnership, CPG signed a supply agreement to purchase straw resin.

PLA Products: Some of our current customers’ product applications using PLA-based resins are below:

- Drinking cups that are coated with our compostable extrusion coating resin.
- Shrink wrap films for various food packaging.
- Cutlery.

Raw Materials and Suppliers

Our operations depend upon obtaining adequate supplies of raw materials on a timely basis, in particular canola oil, PLA, polybutylene succinate (“PBS”), and polybutylene adipate terephthalate (“PBAT”). Although certain of these raw materials have limited sources of supply, we have developed strategic relationships with key suppliers for these products and generally have commitments or contracts from these suppliers to meet current and projected needs. We buy PLA from NatureWorks LLC and Total Corbion, PBS from PTT MCC Biochem Co., Ltd and PBAT from BASF Corporation. Commodities such as canola oil are readily available from numerous suppliers. Accordingly, we believe that we will be able to procure the necessary quantity and quality of raw materials needed to manufacture our products.

Intellectual Property and Technology

Our success depends in part upon our ability to protect our core technology and intellectual property, and we rely on a combination of patents, know-how, trade secrets, non-disclosure agreements and supply chain partnerships to establish and protect our intellectual property.

We hold a combination of over 480 patents and pending patent applications worldwide in more than 20 countries. Our extensive patent portfolio covers the fundamental biotechnology needed to produce our PHA biopolymers as well as biopolymer compositions, processes, derived products, and applications. Our patents also include those associated with Danimer Catalytic Technologies, including catalyst syntheses, catalyst carbonylation, polymerization, and thermolysis and other related areas.

We also hold patents addressing the conversion of PHA into articles such as diapers, feminine hygiene products, films, fibers, and molded articles, which protect our technology all the way to the “store shelf”. In addition, we hold patents and/or applications in areas as diverse as production systems, additives for bioplastics and unique specialty applications such as the use of materials in the oil and gas industry.

The terms of such patents are set to expire at various times between 2023 and 2040, and any patents resulting from such pending patent applications are expected to have a duration that will expire between 2036 and 2042. Our technology is also protected by maintaining trade secret and know-how status for key technology. In addition, non-disclosure agreements with customers and research partners help to keep our technology proprietary.

We purchased the intellectual property portfolio that formed the basis of our original PHA technology platform from The Procter & Gamble Company (“P&G”). After a global offering of the technology to competent entities, P&G determined that our expertise and demonstrated success offered the highest probability of successful commercialization. P&G retained a royalty interest equal to \$0.05 per pound of PHA produced up to 500,000,000 pounds and \$0.025 per pound over 500,000,000 pounds. The royalty term expires September 8, 2027, unless earlier terminated.

Government Regulation

Regulation by government authorities in the United States and other countries is a significant factor in the production and marketing of our products and our ongoing R&D activities. In order to research, develop, and manufacture products for our customers and ultimately for consumer use, we must satisfy mandatory procedures and standards established by various regulatory bodies. Compliance with these standards is complex, and failure to comply with any applicable standards can result in significant consequences.

Nodax has been cleared for use in food-contact applications by the FDA and is also contained on positive lists for food-contact in the European Union and Japan. This has allowed our biopolymers to be used in certain food packaging applications such as PHA-coated paper cups and drinking straws. We are in the process of seeking further regulatory approvals necessary to sell and produce our products based on local requirements in various jurisdictions worldwide, and we are prepared to seek additional such approvals as may become necessary in the ordinary course of business.

Biobased and Biodegradability Certification

Our biopolymers have the advantage in the marketplace of being both biobased and biodegradable while having comparable functional properties to petroleum-based polymers. Our products may be certified for both biodegradability and composting. We obtain such certifications from recognized certifying bodies for our base products. As customers purchase product for a specific use, the customer typically obtains an updated certification covering the customer's manufacturing specifications.

Human Capital

As of December 31, 2022, we had 271 total employees located in the United States and Europe. None of our employees are subject to a collective bargaining agreement, and we believe we have a good relationship with our employees.

We believe our employees are our greatest asset, and we seek to provide a safe, inclusive, high-performance culture where our people thrive. We strive to recruit, develop, engage, train and protect our workforce. The following are key human capital measures and objectives on which we currently focus.

Diversity, Equity and Inclusion ("DEI")

A critical part of our recruiting strategy is partnering with colleges and universities to create awareness of career opportunities in our field and develop a strong pipeline of early career professionals, particularly women and other underrepresented groups in science and engineering. While recruitment is our current greatest focus for DEI, we intend to deepen our efforts through training, mentorship and career development opportunities.

Employee Engagement and Training

We strive to foster a fulfilling and positive work environment for our employees. We offer competitive salaries and benefits to both full time employees and contractors, which include health insurance, life insurance, long-term disability, 401(k) matching, employee stock purchase plan, paid vacation and paid time off. Education and continuous learning are particularly important in our evolving industry, and we encourage our employees to pursue professional development and relevant training opportunities.

ITEM 1A. RISK FACTORS

Investing in our securities involves risks. In addition to the risks and uncertainties discussed above under "Cautionary Note Regarding Forward-Looking Statements," investors should carefully consider the specific risks set forth herein. If any of these risks actually occur, it may materially harm our business, financial condition, liquidity, and results of operations. As a result, the market price of our securities could decline. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may become material and adversely affect our business. The following discussion should be read in conjunction with the Consolidated Financial Statements and Notes to Consolidated Financial Statements included in this Report.

Risk Factor Summary

- We have limited experience producing PHA in large commercial quantities and may not be able to achieve the planned production capacity at our current and proposed production facilities.
- If our products and product candidates do not gain market acceptance among key market participants, we may be unable to generate significant revenues.
- Our operating results may fluctuate significantly as a result of a variety of factors, many of which are outside of our control.
- We will need to secure additional funding, which may dilute stockholders' ownership, and we may be unable to raise additional capital on favorable terms, if at all.
- Changes in regulations associated with our products, markets, and/or operations may have an adverse effect on our business.
- Our debt and operating lease obligations could adversely affect our financial condition.

- We may not be able to satisfy the requirements of our participation in a New Markets Tax Credit program for funding plant expansions.
- Concentration of ownership among our existing executive officers, directors and their affiliates may prevent investors from influencing significant corporate decisions.

Risks Related to the Company

We have a history of net losses and our future profitability is uncertain.

We have recorded a loss for fiscal year 2022 and our future profitability is uncertain. At December 31, 2022, our accumulated deficit was \$298.6 million. Since our inception, we have been engaged primarily in research and development and early-stage commercial activities. Because we have a limited history of commercial operations and operate in a rapidly evolving industry, we cannot be certain that we will generate sufficient revenue to operate our business and become profitable.

Our ability to generate revenues in the near-term is highly dependent on the successful commercialization of our biopolymer products, which is subject to many risks and uncertainties as described below. We expect that it will take time for our PHA production to ramp up to an economical scale while the market for our products expands. As a result, we may have significant losses and negative cash flow for at least the next few years, as we incur costs and expenses for the continued development and expansion of our business, including the costs of establishing manufacturing capacity and ongoing expenses of research and product development. The amounts we spend will impact our ability to become profitable and this spending will depend, in part, on the number of new products that we attempt to develop. We may not succeed with any or all of these products and, thus, we cannot provide assurances that we will ever be profitable.

Even if we can successfully manufacture and sell our products, whether we will be able to generate a profit on any of these products is highly uncertain and depends on a number of factors including the cost of production, the prices we are able to charge for these products, and the emergence of competing products.

Our operating results may fluctuate significantly as a result of a variety of factors, many of which are outside of our control.

We are subject to, among other things, the following factors that may negatively affect our operating results:

- our ability to attract new customers and retain existing customers;
- the amount and timing of operating costs and capital expenditures relating to the expansion of our business, operations and infrastructure;
- the availability and cost of our raw materials;
- changes in market conditions and other inputs that affect the valuation of our outstanding warrants;
- the announcement or introduction of new products by our competitors;
- our ability to upgrade and develop our systems and infrastructure to accommodate growth;
- stock-based compensation expenses we have incurred and may continue to incur in connection with the compensation of our executives and key personnel;
- our ability to attract and retain key personnel in a timely and cost-effective manner;
- technical difficulties;
- our ability to identify and enter into relationships with appropriate and qualified third-party providers of necessary testing and manufacturing services;
- regulation by federal, state or local governments; and
- general economic conditions, as well as economic conditions specific to the plastics industry, and other industries related to compostable or biodegradable substitutes for non-biodegradable plastics.

As a result of our limited operating history and the nature of the markets in which we compete, it is difficult for us to forecast our revenues or earnings accurately. We have based our anticipated future expense levels largely on our investment plans and estimates of future events, although certain of our expense levels will, to a large extent, become fixed. As a strategic response to changes in the competitive environment, we may from time to time make certain decisions concerning expenditures, pricing, service or marketing that could have a material and adverse effect on our business, results of operations and financial condition. Due to the foregoing factors, our revenues and operating results are difficult to forecast.

We will need to secure additional funding and may be unable to raise additional capital on favorable terms, if at all.

We will need to raise additional capital to continue to scale and expand our manufacturing capability. If we issue equity or debt securities to raise additional funds, (i) we will incur fees associated with such issuance, (ii) our existing stockholders will experience dilution from the issuance of new equity securities, (iii) we will incur ongoing interest expense and may be required to grant a security interest in our assets in connection with any debt issuance, and (iv) any new equity or debt securities may have rights, preferences and privileges senior to those of our existing stockholders. In addition, utilization of our net operating loss and research and development credit income tax carryforwards may be subject to significant annual limitations under Section 382 of the Internal Revenue Code (“Code”) due to ownership changes resulting from future equity financing transactions. If we raise additional funds through collaboration, licensing or other similar arrangements, it may be necessary to relinquish valuable rights to our potential products or proprietary technologies or to grant licenses on unfavorable terms. In the event we are unable to obtain additional financing, we may be unable to successfully implement our business plan, which would have a material and adverse impact on our business.

Our biopolymer products may not achieve market success.

Some prospective customers are currently evaluating and testing our products prior to making large-scale purchase decisions. The successful commercialization of our biopolymers is also dependent on our customers’ ability to commercialize the end-products that they make from our biopolymers, which may never gain market acceptance.

Market acceptance of our products will depend on numerous factors, many of which are outside of our control, including among others:

- consumer acceptance of such products;
- our ability to produce products of consistent quality that offer functionality comparable or superior to existing or new polymer products;
- our ability to obtain necessary regulatory approvals for our products;
- the speed at which potential customers qualify our biopolymers for use in their products;
- the pricing of our products compared to competitive products, including petroleum-based plastics;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control distribution channels; and
- general market conditions.

Raw material pricing and availability may be impacted by factors out of our control.

Pricing and availability of raw materials for use in our businesses can be volatile due to numerous factors beyond our control, including general, domestic and international economic conditions, labor costs, production levels, competition, and consumer demand. Drought, pestilence, severe weather or other “acts of God” may limit our ability to procure bio-based raw materials if crops are lost. This volatility can significantly affect the availability and cost of raw materials for us and may therefore have a material adverse effect on our business, results of operations, and financial condition.

We sell formulated resins that include raw materials, including PLA, purchased from third parties. Our first targeted Rinnovo polymer requires ethylene oxide, carbon monoxide and a proprietary catalyst as its primary raw materials. We currently source all of our PLA from two suppliers, NatureWorks LLC and Total Corbion PLA. Due to the high rate of growth in the biopolymer market, the demand for PLA and other raw materials used in our products may outpace supply, which could result in price increases and deficits in the supply necessary to meet customer demand. If we are unable to secure the required quantities of PLA and other raw materials, we may not be able to achieve our financial forecasts and fulfill customer demand.

We have limited experience producing PHA in large commercial quantities.

We have limited experience in producing large quantities of PHA. While we have succeeded in producing smaller amounts of PHA in our pilot plant for customer trials and testing purposes, we continue to scale up the production of PHA in a large commercial plant with a capacity sufficient to meet the anticipated needs of prospective customers. We may not be able to cost effectively produce PHA at a scale consistent with customer demand in a timely or economical manner, or that the quality of the commercial product will be acceptable on a consistent basis.

We may be unable to obtain certifications required by certain customers.

Many of our customers require biopolymer formulations to undergo biodegradability testing to address physical property deterioration in specific environmental conditions. Biodegradation certification is important for our customers to ensure those products can be effectively marketed and sold and meet customer demands on environmental protection. If our new PHA-based resins produced and sold out of the Kentucky Facility do not achieve the required certifications in a timely manner, we may experience a delay in going to market. Such a delay could result in us not achieving our financial forecasts and not fulfilling customer demand.

We may be unable to manage rapid growth effectively.

Any potential failure to manage growth effectively could have a material and adverse effect on our business, results of operations, and financial condition. We anticipate that a period of significant expansion will be required to address potential growth and to handle licensing and research activities. This expansion will place a significant strain on our management, operational and financial resources. To manage the expected growth of our operations and personnel, we must establish appropriate and scalable operational and financial systems, procedures and controls. Our management may be unable to hire, train, retain and manage the necessary personnel or to identify, manage and exploit potential strategic relationships and market opportunities.

We may be delayed in or unable to procure necessary capital equipment.

While the equipment we use to produce PHA and our other products is currently widely available, we must rely on outside companies to continue to manufacture the equipment necessary to produce our products. If our suppliers of capital equipment are unable or unwilling to provide us with necessary capital equipment to manufacture our products or if we experience significant delays in obtaining the necessary manufacturing equipment, our business, results of operations, and financial condition could be adversely affected.

Our success will be influenced by the price of petroleum relative to the cost of bio-based feedstocks.

Our success may be influenced by the price of our products relative to petroleum-based polymers. The cost of petroleum-based polymers is in part based on the price of petroleum. To date, our PHA biopolymers have been primarily manufactured using canola oil, an agricultural feedstock. If the price of bio-based feedstocks increases and/or the price of petroleum decreases, our bio-based products may be less competitive relative to petroleum-based polymers. A material decrease in the cost of conventional petroleum-based polymers may require a reduction in the prices of our products for them to remain attractive in the marketplace and/or reduce the size of our addressable market.

Certain contracts granting exclusivity rights to customers may limit our ability to sell products in certain markets.

We have entered into certain agreements with customers that grant the exclusive right to purchase certain products from us and, in some cases, in certain fields and/or territories. For example, certain clam-shell food cases made with plastic we produce can only be sold to a single customer, certain stirrers and straw products can only be sold to certain end-users, and one customer has an exclusive right on bottles containing certain alcohol products. These exclusivity arrangements will be expiring between 2023 and 2026. These agreements could prevent us from selling products to certain prospective customers or entering certain markets, which could have a material and adverse impact on our potential revenues and our ability more generally to expand our customer base and product lines.

Our business depends on a small group of key customers for a significant portion of our sales.

A few significant customers have in the past, and may in the future, account for a significant portion of our revenues in any one year or over a period of several consecutive years. For example, in 2022, we had two customers that individually accounted for more than 10% of our revenue and collectively accounted for 40% of our revenue, whereas, in 2021, we had two customers that individually accounted for more than 10% of our revenue and collectively accounted for approximately 35% of our revenue. The loss of one or more of our significant customers, a substantial reduction in their orders, their inability to perform under their contracts, and/or a significant deterioration in their financial condition could have a material adverse effect on our business, results of operations, and financial condition.

We may rely heavily on future collaborative partners.

We may enter into strategic partnerships with other companies to accomplish one or more of the following:

- obtain capital, equipment and facilities;
- obtain funding for research and development programs, product development programs, and commercialization activities;
- obtain expertise in relevant markets;
- obtain access to proprietary technologies;
- obtain access to raw materials; and/or
- obtain sales and marketing services or support.

We may not be successful in establishing or maintaining suitable partnerships. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements could have a material adverse effect on our business and financial condition.

We face and will face substantial competition.

We face and will face substantial competition from a variety of companies in the biodegradable, renewable resource-based plastic segment, as well as from companies in the conventional, non-biodegradable petroleum-based industry segment. Some of their products are suitable for use in a range of products at prices that may be lower than the prices of our product offerings. Many of these companies have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical or other resources than we have. Our competitors may be able to adapt more quickly to new or emerging technologies, changes in customer requirements and changes in laws and regulations. In addition, current and potential competitors have established or may establish financial or strategic relationships among themselves, with existing or potential customers, or with other third parties. Accordingly, new competitors or alliances among competitors could emerge and rapidly acquire significant market share. There can be no assurance that we will be able to compete successfully against current or new competitors.

We may not be able to complete the proposed production capacity buildout at our Greenfield Facility.

In November 2021, we broke ground on our Greenfield Facility located in Bainbridge, Georgia. We have designed this plant to have the capacity to produce 62.5 million pounds of neat PHA to be blended with other purchased raw materials. The Greenfield Facility has an engineering cost estimate ranging from \$515 million to \$665 million. Through December 31, 2022, we have invested \$171.1 million in the Greenfield Facility, excluding capitalized interest and internal labor. We have suspended construction of the Greenfield Facility and completion of the facility is contingent upon receiving additional financing. In the event we do not obtain additional financing, we may be unable to successfully complete the Greenfield Facility, which could have a material and adverse impact on that investment.

We may not be able to identify and build a Rinnovo facility.

On August 11, 2021, we acquired Danimer Catalytic Technologies (formerly Novomer, Inc.). Danimer Catalytic Technologies has proprietary technology to produce p(3HP), which is a type of PHA and is branded as Rinnovo. We plan to construct a commercial Rinnovo plant and, at scale, we anticipate the proposed Rinnovo facility could produce approximately 168 million pounds of p(3HP). We believe we can blend Rinnovo with Nodax and other raw materials to further increase the number of finished pounds of product we can produce. We currently anticipate spending between \$140 million and \$220 million on the Rinnovo facility. There can be no assurances, however, that we will be able to identify an acceptable site, construct the facility, incorporate Rinnovo into Nodax-based formulations or raise the financing needed to construct the Rinnovo facility.

We may not be able to identify additional facilities and assets or secure the funding necessary to acquire them.

We may need to identify other facilities and assets that would be beneficial to our production of PHA at the commercial scale or our growth in general. We cannot provide assurances that we will be successful in identifying such facilities and assets or, if we do, raise the financing needed to acquire them.

Climate change may impact the availability of our facilities and, in addition, we may incur substantial costs to comply with climate change legislation and related regulatory initiatives.

Changing weather patterns and any increase in frequency of severe storms such as hurricanes and tornadoes could cause disruptions or the complete loss of our facilities. In addition, climate change concerns, and changes in the regulation of such concerns, including greenhouse gas emissions, could also subject us, our suppliers, or our customers to additional costs and restrictions, including increased energy and raw materials costs, which could negatively impact business, results of operations, and financial condition.

We are subject to product liability claims that may not be covered by insurance and could require us to pay substantial sums.

As our business grows and expands into different markets, we will increasingly become subject to an inherent risk of, and adverse publicity associated with, product liability and other liability claims, whether or not such claims have merit. We have obtained product liability insurance coverage in amounts and scope that we believe to be commercially reasonable and adequate for our product mix. However, product liability insurance may not continue to be available to us on commercially acceptable terms, or at all. Even if such insurance is available, product liability or other claims may exceed our insurance coverage limits. A successful product liability claim that exceeds our insurance coverage limits could require us to pay substantial sums and could have a material adverse effect on us.

Changes in government regulations encouraging the use of biodegradable alternatives to plastic products may have an adverse effect on our business.

We anticipate future laws, regulations and policies designed to encourage or mandate the increased use of compostable and biodegradable alternatives to non-biodegradable plastics may help to create a key market for our products. Several countries and other political subdivisions of countries have enacted or are considering enacting such laws and regulations. Failure to implement these or similar laws and regulations and changes to existing laws and regulations may delay or adversely affect the demand for our product candidates in the future.

Compliance costs related to environmental requirements could negatively impact our financial results.

We are subject to extensive federal, state, local and foreign laws, regulations, rules and ordinances relating to pollution, protection of the environment, climate change, greenhouse gas emissions, and the generation, storage, handling, transportation, treatment, disposal and remediation of hazardous substances and waste materials. Costs and capital expenditures relating to environmental, health or safety matters are subject to evolving regulatory requirements and depend on the timing of the promulgation and enforcement of specific standards which impose the requirements. Moreover, changes in environmental regulations could inhibit or interrupt our operations or could require modifications to our facilities. Accordingly, environmental, health or safety regulatory matters could result in significant unanticipated costs or liabilities.

Our business is subject to hazards common to chemical, fermentation, polymer, and extraction businesses, any of which could injure our employees or other persons, damage our facilities or other properties, interrupt our production and adversely affect our reputation and results of operations.

Our business is subject to hazards common to chemical and polymer manufacturing, storage, handling and transportation, including explosions, fires, severe weather, natural disasters, mechanical failure, chemical spills, discharges or releases of toxic or hazardous substances or gases and other risks. These hazards can cause personal injury and loss of life to our employees and other persons, and severe damage to, or destruction of, property and equipment, as well as environmental contamination. In addition, the occurrence of disruptions, shutdowns or other material operating problems at our facilities due to any of these hazards may diminish our ability to meet our output goals. Accordingly, these hazards and their consequences could adversely affect our reputation and have a material adverse effect on our operations as a whole, including our results of operations and cash flows, both during and after any period of operational difficulties.

We may not be able to protect adequately our patents and other intellectual property assets, which could adversely affect our competitive position and reduce the value of our products, and litigation to protect our patents and intellectual property assets may be costly.

Our commercial success may depend in part on our ability to obtain patent protection for technologies and products we develop, to preserve trade secrets and to operate without infringing the proprietary rights of others. There can be no assurance that any patents or patent applications that we own, file or are able to obtain or license from third parties will afford any competitive advantages or will not be challenged or circumvented by third parties. Furthermore, there can be no assurance that others will not independently develop similar technologies or duplicate any technology developed by us. Because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that before any of our potential products can be commercialized, any related patents may expire or may have only a brief remaining life span following commercialization, thus reducing any advantage of the patents.

If we are not able to obtain patent coverage or defend the patent protection for our technologies, then we will not be able to exclude competitors from developing or marketing competing technologies, and we may not generate enough revenues from product sales to justify the cost of development of our technologies and to achieve or maintain profitability. The patents currently in the portfolio have expiration dates ranging from 2023 to 2040 and any patents resulting from pending patent applications are expected to have a duration that will expire between 2036 and 2042.

Our patent position involves complex legal and factual questions. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. Patents may not be issued for any pending or future pending patent applications owned by or licensed to us, and claims allowed under any issued patent or future issued patent owned or licensed by us may not be valid or sufficiently broad to protect our technologies. Moreover, we may be unable to protect certain of our intellectual property in the United States or in foreign countries. Foreign jurisdictions may not afford the same protections as U.S. law, and we cannot ensure that foreign patent applications will have the same scope as the U.S. patents. There will be many countries in which we will choose not to file or maintain patents because of the costs involved. Competitors may also design around our technology or develop competing technologies.

Additionally, any issued patents owned by or licensed to us now or in the future may be challenged, invalidated or circumvented. To the extent competitors or other third parties develop and market products or procedures that we believe infringe our patents and proprietary rights, we may be compelled to initiate lawsuits to protect and enforce our intellectual property rights. Such litigation is typically expensive, time-consuming and uncertain as to outcome, and may involve opponents who have much more extensive financial resources than we do. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

Third parties may claim that we infringe on their proprietary rights and may prevent us from commercializing and selling our products.

There has been substantial litigation in the manufacturing industry with respect to the manufacture, use, and sale of new products. These lawsuits often involve claims relating to the validity of patents supporting the new products and/or the validity and alleged infringement of patents or proprietary rights of third parties. We may be required to defend against challenges to the validity of our patents and against claims relating to the alleged infringement of patent or proprietary rights of third parties.

Litigation initiated by a third-party claiming patent invalidity or patent infringement could:

- require us to incur substantial litigation expense, even if we are successful in the litigation;
- require us to divert significant time and effort of our management;
- result in the loss of our rights to develop, manufacture or market our products; and
- require us to pay substantial monetary damages or royalties in order to license proprietary rights from third parties or to satisfy judgments or to settle actual or threatened litigation.

Although patent and intellectual property disputes within the biopolymer and chemical industries have often been settled through licensing or similar arrangements, costs associated with these arrangements may be substantial and could include the long-term payment of royalties. Furthermore, the required licenses may not be made available to us on acceptable terms. Accordingly, an adverse determination in a judicial or administrative proceeding or a failure to obtain necessary licenses could prevent us from manufacturing and selling our products or increase our costs to market our products.

We rely in part on trade secrets to protect our technology, and our failure to obtain or maintain trade secret protection could limit our ability to compete.

We rely on trade secrets to protect some of our technology and proprietary information, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. Litigating a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time consuming, and the outcome would be unpredictable. Moreover, if our competitors independently develop similar knowledge, methods and know-how, it will be difficult for us to enforce our rights and our business could be harmed.

Our debt obligations could adversely affect our financial condition.

As of December 31, 2022, we had \$288.4 million of consolidated debt. Our indebtedness could have significant negative consequences for our business, results of operations and financial condition, including that it may:

- require us to use a substantial portion of our cash flow from operations to pay principal and interest on debt, which will reduce the amount of cash flow available to fund working capital, capital expenditures, acquisitions, and other business activities;
- adversely impact our credit rating, which could increase future borrowing costs, liquidity and access to capital markets;
- limit our future ability to raise funds for capital expenditures, strategic acquisitions or business opportunities, and other general corporate requirements;
- increase our vulnerability to adverse economic and industry conditions; and
- place us at a competitive disadvantage relative to competitors with less leverage and/or superior access to capital.

There can be no assurance that our business will generate cash flow from operations, or that additional capital will be available to us, in amounts sufficient to enable us to meet our debt payment obligations and to fund other liquidity needs. Additionally, events and circumstances may occur which would cause us to not be able to satisfy applicable draw-down conditions and utilize revolving credit facilities. Furthermore, a default under one debt instrument itself could also lead to a default under agreements governing our other indebtedness, which may result in that other indebtedness becoming immediately payable in full.

We may not be able to generate sufficient cash to service our debt, operating leases and other obligations, and we may be forced to take other actions to satisfy such obligations, which may not be successful.

Our ability to make scheduled payments on or to refinance our debt, operating leases and other obligations depends on our ability to generate cash in the future and our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. There can be no assurance that we will generate and maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our debt, or to pay our other obligations.

If our cash flows and capital resources are insufficient to fund these obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our debt. These alternative measures may not be successful and may not permit us to meet these obligations. We may not be able to consummate those dispositions or to obtain the proceeds sought from them, and these proceeds may not be adequate to meet any such obligations then due. Further, we may need to refinance all or a portion of our debt on or before maturity, and there can be no assurance that we will be able to refinance any of our debt on commercially reasonable terms or at all. Additionally, if we are unable to service our operating lease payments for certain facilities in Bainbridge, Georgia and Winchester, Kentucky, which we lease pursuant to a sale-leaseback transaction that was entered into in 2018 with a commercial property REIT, we could lose the ability to occupy and operate those facilities.

We may incur more debt in the future, which could further exacerbate the risks of leverage, including the ability to service our indebtedness.

We may need to incur additional debt, including equipment loans, working capital lines of credit, senior notes and other long-term debt, in the future to complete acquisitions of facilities, equipment, machinery and other assets or capital projects or for working capital. Although the covenants contained in our current indebtedness instruments impose limits on our ability to incur new debt, these agreements may permit the incurrence of significant additional debt if we satisfy certain conditions, or such debt instruments may be amended in the future to do so. If we incur new debt, we could face risks related to being in a highly leveraged company, including our ability to service such indebtedness.

We may not be able to satisfy the requirements of our participation in a New Markets Tax Credit (“NMTC”) program for funding our plant expansions.

We have entered into several arrangements under the NMTC program with various third-party financial institutions (“Investors”) to help fund various phases of plant expansions at our Bainbridge, Georgia, and Winchester, Kentucky locations. In connection with the NMTC transactions, we received proceeds that were restricted for use on approved capital expenditures and working capital needs at specific subsidiaries. The NMTCs are subject to 100% recapture of the tax credit for a period of seven years as provided in the Code. We are required to comply with various regulations and contractual provisions that apply to the NMTC arrangements. We have agreed to indemnify the Investors for any loss or recapture of the NMTCs until such time as our obligation to deliver tax benefits is relieved. The maximum potential amount of future payments under this indemnification could be up to the face amount of the related debt, net of certain leverage loans receivable in connection with the NMTC transactions, which amount totaled \$31.4 million as of December 31, 2022. Our obligation to deliver tax benefits will be relieved in various stages from April 2026 through November 2029. Non-compliance with applicable requirements could result in projected tax benefits not being realized by an investor and our being required to indemnify such investor, which could have a material adverse effect on our financial position, results of operations or liquidity.

Our ability to use net operating losses to offset future taxable income will be subject to certain limitations as a result of the business combination, private placement and past transactions.

Certain of our deferred tax assets relate to federal and state net operating losses and credits. As of December 31, 2022 and 2021, we had available federal net operating loss carryforwards of \$226 million and \$156 million, respectively. We had state net operating loss carryforwards as of December 31, 2022 and 2021 of \$223 million and \$173 million, respectively. A portion of these net operating loss carryforwards could expire unused and be unavailable to offset future income tax liabilities. In addition, in general, under Section 382 of the Code, a corporation that undergoes an “ownership change” is subject to limitations on our ability to utilize our pre-change net operating losses (“NOLs”) to offset future taxable income or taxes. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least 5% of a corporation’s stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. A portion of our existing NOLs is subject to limitations arising from previous ownership changes in 2014. In addition, we believe the Business Combination and the related private placement of our Class A common stock that we completed in connection therewith constitutes an ownership change under Section 382 of the Code. Our NOLs may also be impaired under state law. A portion of our existing NOLs attributable to Legacy Danimer and its subsidiaries is also subject to the so called separate-return-limitation-year (“SRLY”) rules that may apply to consolidated tax groups.

Our ability to utilize our NOLs is also conditioned upon our attaining profitability and generating U.S. federal and state taxable income. We have incurred significant net losses in the past, and it is anticipated that we may continue to incur significant losses; therefore, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOL carryforwards, even to the extent they are not subject to limitation by Section 382 of the Code or the SRLY rules.

We face various risks related to the ongoing coronavirus (COVID-19) pandemic and similar public health crises, which may have material adverse effects on our business, financial position, results of operations and liquidity.

We face various risks related to health epidemics, pandemics and similar outbreaks, including the ongoing coronavirus disease 2019 (“COVID-19”) pandemic. Such risks include disruptions or restrictions on our employees’ ability to work effectively, as well as temporary closures of our facilities or the facilities of our customers or suppliers.

It is possible that the continued spread of COVID-19 and its variants could also further cause disruption in our supply chain; cause delay or limit the ability of other customers to perform, including in making timely payments to us; and cause other unpredictable events. In addition, the continued spread of COVID-19 and its variants has led to disruption and volatility in the global capital markets, which increases the cost of capital and adversely impacts access to capital.

We continue to work with our stakeholders (including customers, employees, suppliers and local communities) to responsibly address risks associated with COVID-19. Our management is focused on mitigating the impact of the pandemic, which has required and will continue to require a substantial investment of time and resources across Danimer and could delay other value-added initiatives. We continue to monitor the situation, to assess further possible implications to our business, supply chain and customers, and to take actions in an effort to mitigate adverse consequences.

The situation surrounding COVID-19 remains fluid and the ongoing impact on our business and results of operations, financial condition, expected cash flows and liquidity may vary in material ways depending on how the virus impacts activity levels in the United States and globally. For this reason, we cannot reasonably estimate with any degree of certainty the future impact COVID-19 may have on our results of operations, financial position, and liquidity. The extent to which the COVID-19 pandemic may impact our business, operating results, financial condition and liquidity will depend on future developments and numerous and evolving factors that are highly uncertain, vary by market and cannot be accurately predicted or quantified at this time, including the duration and spread of the outbreak; new information concerning its transmission and severity; government mandated restrictions and regulations; business and workforce disruptions; impact on demand for our products, and the effectiveness of actions taken to contain and treat the disease; actions taken or that might be taken by governments, businesses or individuals to contain or reduce its repercussions and mitigate its economic implications; evolving macroeconomic factors, including general economic uncertainty, unemployment rates and recessionary pressures; decreased consumer spending levels; reduction or changes in customer demand for our products and services; our ability to manufacture, sell and provide our products and services, including as a result of travel restrictions, closed borders, operating restrictions imposed on our facilities or reduced ability of our employees to continue to work efficiently; increased operating costs (whether as a result of changes to our supply chain or increases in employee costs or otherwise); collectability of customer accounts; additional and prolonged devaluation of other countries' currencies relative to the dollar; and the general impact of the pandemic on our customers, employees, suppliers, vendors and other stakeholders. Additionally, customers might defer decision making, delay orders or seek to renegotiate or terminate existing agreements.

The continuing global pandemic may also result in delays in our ability to apply for and obtain further regulatory approval for our products in various jurisdictions.

The impact of COVID-19 may also exacerbate other risks discussed herein, any of which could have a material effect on us. This situation continues to evolve, and additional impacts may arise that we are not aware of currently.

We depend on key personnel.

We depend greatly on our executive officers and other employees. Our success will depend, in part, upon our ability to attract and retain additional skilled personnel, which will require substantial additional funds. There can be no assurance that we will be able to find, attract and retain additional qualified employees, directors, and advisors having the skills necessary to operate, develop and grow our business. Our inability to hire qualified personnel, the loss of services of any of our executive officers, or the loss of services of other key employees, or advisors that may be hired in the future, may have a material and adverse effect on our business.

If we experience a significant disruption in our information technology systems, including security breaches, or if we fail to implement new systems and software successfully, our business operations and financial condition could be adversely affected.

We depend on information technology systems throughout Danimer to, among other functions, control our manufacturing processes, process orders and bill, collect and make payments, interact with customers and suppliers, manage inventory and otherwise conduct business. We also depend on these systems to respond to customer inquiries, contribute to our overall internal control processes, maintain records of our property, plant and equipment and record and pay amounts due to vendors and other creditors. The failure of our information technology systems to perform as we anticipate could disrupt our business and could result in transaction errors, processing inefficiencies and the loss of sales and customers. As we upgrade or change systems, we may also experience interruptions in service, loss of data or reduced functionality and other unforeseen material issues that could adversely impact our ability to provide quotes, take customer orders and otherwise run our business in a timely manner. In addition, if our new systems fail

to provide accurate and increased visibility into pricing and cost structures, it may be difficult to improve or maximize our profit margins. As a result, our results of operations could be adversely affected.

In addition, cyber-attacks or security breaches could compromise confidential, business critical information, cause a disruption in our operations or harm our reputation. Our information technology systems are subject to potential disruptions, including significant network or power outages, cyberattacks, computer viruses, other malicious codes and/or unauthorized access attempts, any of which, if successful, could result in data leaks or otherwise compromise our confidential or proprietary information and disrupt our operations. Despite our efforts to protect sensitive information and comply with and implement data security measures, there can be no assurance that any controls and procedures that we have in place will be sufficient to protect us. Further, as cyber threats are continually evolving, our controls and procedures may become inadequate and we may be required to devote additional resources to modify or enhance our systems in the future. We may also be required to expend resources to remediate cyber-related incidents or to enhance and strengthen our cyber security. Any such disruptions to our information technology systems, breaches or compromises of data, and/or misappropriation of information could result in violation of privacy and other laws, litigation, fines, negative publicity, lost sales or business delays, any of which could have a material adverse effect on our business, financial condition or results of operations.

Government regulation of our business is extensive and regulatory approvals are uncertain, expensive and time-consuming.

Our research, development, testing, manufacturing and marketing of most of our intended products are subject to an extensive regulatory approval process by the FDA and other regulatory agencies in the U.S. and abroad. The process of obtaining FDA and other required regulatory approvals is lengthy, expensive and uncertain. There can be no assurance that, even after such time and expenditures, we will be able to obtain necessary regulatory approvals for the manufacturing or marketing of any products. Even if regulatory clearance is obtained, a marketed product is subject to continual review, and later discovery of previously unknown safety issues or failure to comply with the applicable regulatory requirements may result in restrictions on a product's marketing or withdrawal of the product from the market, as well as possible civil or criminal sanctions.

Changes in sentiment regarding and laws and regulations relating to plastic products could reduce demand for our products and/or increase the cost of producing our products and have an adverse effect on our business.

Plastic products have recently faced increasingly negative public sentiment and scrutiny. In addition, foreign, state and local governments have increasingly proposed, or in some cases implemented, restrictions or bans on plastic-based products, including single-use plastics, plastic straws and utensils. Notwithstanding the fact that our bio-plastic products are intended to address many of the concerns regarding traditional petroleum-based plastics, increased regulation of, or prohibition on, the use of plastics generally, as well as negative public sentiment regarding such products, could increase the costs incurred by our customers to use such products or otherwise limit the use of these products, and could lead to a decrease in demand for the products we make or an increase in the cost of production of such products. Such a decrease in demand could adversely affect our business, operating results and financial condition.

We may be unsuccessful in integrating acquisitions.

There may be many challenges to integrating acquired businesses into our Company, including eliminating redundant operations, facilities and systems, coordinating management and personnel, retaining key employees, managing different corporate cultures and achieving cost reductions and cross-selling opportunities. We may not be able to meet these challenges.

Potential international business opportunities may expose us to additional risks.

A part of our growth strategy depends on expanding internationally. Although sales outside of the United States account for a lesser percentage of our total net sales, we expect to increase our level of business activity outside of the United States. Some countries that present potential good business opportunities also face political and economic instability and vulnerability to infrastructure and other disruptions. Seeking to expand our business internationally exposes us to additional risks, which include foreign exchange risks and currency fluctuations, as discussed more fully below, political and economic uncertainties, changes in local business conditions and national and international conflicts. We also face the potential risks arising from staffing, monitoring and managing international operations, including the risk such activities may divert our resources and management time. In addition, compliance with the laws, regulations and taxes of multiple international jurisdictions increases our cost of doing business.

Risks Related to our Common Stock

An active trading market for our Common Stock may not be available on a consistent basis to provide stockholders with adequate liquidity. Our stock price may be extremely volatile, and our stockholders could lose a significant part of their investment.

An active trading market for shares of our common stock may not be sustained on a consistent basis. The public trading price for our common stock will be affected by a number of factors, including:

- reported progress of our business and technology development, relative to investor expectations;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earnings estimates;
- quarterly variations in our or our competitors' results of operations;
- general market conditions and other factors unrelated to our operating performance or the operating performance of our competitors;
- future issuance and/or sale of our common stock or preferred stock;
- announcements by us, or our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- commencement of, or involvement in, litigation;
- any major change in our board of directors or management;
- changes in governmental regulations or in the status of our regulatory approvals;
- announcements related to patents issued to us or our competitors and to litigation involving our intellectual property;
- a lack of, limited, or negative industry or security analyst coverage;
- developments in our industry and general economic conditions;
- short-selling or similar activities by third parties; and
- other factors described elsewhere in these "Risk Factors."

As a result of these factors, our stockholders may not be able to resell their shares of common stock at, or above, their purchase price. In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. Any negative change in the public's perception of the prospects of industrial biotechnology or "clean technology" companies could depress our stock price regardless of our results of operations. These factors may have a material adverse effect on the market price of our common stock.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, investors may need to rely on sales of their shares after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Any decision to declare and pay dividends as a public company in the future will be made at the discretion of our board of directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions, and other factors that our board of directors may deem relevant. In addition, our ability to pay dividends may be limited by covenants of any existing and future outstanding indebtedness we or our subsidiaries incur.

There can be no assurance that we will be able to comply with the continued listing standards of the New York Stock Exchange ("NYSE").

If the NYSE delists our securities from trading on its exchange for failure to meet the listing standards, we and our securityholders could face significant material adverse consequences including:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock," which will require brokers trading in common stock to adhere to more stringent rules, possibly resulting in a reduced level of trading activity in the secondary trading market for shares of our common stock;
- a limited amount of analyst coverage; and

- a decreased ability to issue additional securities or obtain additional financing in the future.

If we do not meet the expectations of investors or securities analysts, the market price of our securities may decline.

If an active market for our securities develops and continues, the trading price of our securities could be volatile and subject to wide fluctuations in response to various factors, some of which are beyond our control. Any of the factors listed below could have a material adverse effect on an investment in our securities. In such circumstances, the trading price of our securities may not recover and may experience a further decline.

Factors affecting the trading price of our securities may include:

- actual or anticipated fluctuations in our quarterly financial results or the quarterly financial results of companies perceived to be similar to us;
- changes in the market's expectations about our operating results;
- success of competitors;
- our operating results failing to meet the expectation of securities analysts or investors in a particular period;
- changes in financial estimates and recommendations by securities analysts concerning Danimer or the biopolymer industry in general;
- share price performance of other companies that investors deem comparable to ours;
- our ability to market new and enhanced products and technologies on a timely basis;
- changes in laws and regulations affecting our business;
- our ability to meet compliance requirements;
- commencement of, or involvement in, litigation involving us;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of our shares of common stock available for public sale;
- any major change in our board of directors or management;
- sales of substantial amounts of our shares of common stock by our directors, executive officers or significant stockholders or the perception that such sales could occur; and
- general economic and political conditions such as recessions, interest rates, fuel prices, international currency fluctuations and acts of war or terrorism.

Broad market and industry factors may materially harm the market price of our securities irrespective of our operating performance. Stock markets in general, and NYSE in particular, have experienced price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of the particular companies affected. The trading prices and valuations of these stocks, and of our securities, may not be predictable. A loss of investor confidence in the market for stocks or the stocks of other companies which investors perceive to be similar to ours could depress our share price regardless of our business, prospects, financial conditions, or results of operations. A decline in the market price of our securities also could adversely affect our ability to issue additional securities and our ability to obtain additional financing in the future.

We may be required to take write-downs or write-offs, or we may be subject to restructuring, impairment or other charges that could have a significant negative effect on our financial condition, results of operations and the price of our common stock.

Factors outside of our control may, at any time, arise. As a result of these factors, we may be forced to later write-down or write-off assets, restructure our operations or incur impairment or other charges that could result in us reporting losses.

Even though these charges may be non-cash items and therefore not have an immediate impact on our liquidity, the fact that we report charges of this nature could contribute to negative market perceptions about us or our securities. In addition, charges of this nature may cause us to be unable to obtain future financing on favorable terms or at all.

The issuance or sale of shares of our common stock, or rights to acquire shares of our common stock, could depress the trading price of our common stock.

We may conduct future offerings of our common stock, preferred stock or other securities that are convertible into or exercisable for our common stock to finance our operations or fund acquisitions, or for other purposes. In addition, as of December 31, 2022, we have 11,844,644 shares of common stock reserved for issuance upon the exercise of outstanding options to purchase common stock issued under Legacy Danimer's stock incentive plans, which outstanding options were assumed by the Company in connection with the Business Combination, and the Company's 2020 Long-Term Incentive Plan ("2020 Plan"), 2,209,288 shares of common stock underlying the unvested portion of outstanding restricted stock awards made under the 2020 Plan, 50,251 shares of common stock underlying the unvested portion of outstanding share-settled performance awards made under the 2020 Plan, 3,914,525 shares of common stock reserved for issuance upon the exercise of private warrants, 1,689,744 shares of common stock reserved for future grant or issuance under the 2020 Plan and 2,403,392 shares of common stock reserved for future issuance under the Company's 2020 Employee Stock Purchase Plan, and 125,489 shares of common stock reserved for issuance upon the exercise of outstanding Legacy Danimer non-plan options that were assumed by the Company in connection with the Business Combination. In addition to the stock options granted under our equity plans, we awarded 972,222 and 1,710,947 stock options in 2022 and 2021, respectively, as well as 439,698 and 95,943 performance shares in 2022 and 2021, respectively, that have a cash settlement feature in the event there are not shares available under the 2020 Plan. In December 2021, we issued \$240 million principal amount convertible notes ("Convertible Notes"). The initial conversion rate is 92.7085 shares of common stock per \$1,000 principal amount of Convertible Notes, which represents an initial conversion price of approximately \$10.79 per share of common stock. If the Convertible Notes were to be converted into common stock in their entirety using the initial conversion rate, we would issue an additional 22,250,040 shares of common stock. If we issue additional shares of our common stock or rights to acquire shares of our common stock, if any of our existing stockholders sells a substantial amount of our common stock, or if the market perceives that such issuances or sales may occur, then the trading price of our common stock may significantly decline. In addition, our issuance of additional shares of common stock will dilute the ownership interests of our existing common stockholders.

The capped call transactions may affect the value of our common stock.

In connection with our issuance of the Convertible Notes, we entered into privately negotiated capped call transactions. The capped call transactions are generally intended to reduce the potential dilution to our common stock upon any conversion of the Convertible Notes and/or offset any potential cash payments we are required to make in excess of the principal amount of converted notes, as the case may be, with such reduction and/or offset subject to a cap.

In addition, the option counterparties and/or their respective affiliates may hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the Convertible Notes (and are likely to do so following any conversion of the Convertible Notes, any repurchase of the Convertible Notes by us on any fundamental change repurchase date, any redemption date or any other date on which the Convertible Notes are retired by us, in each case if we exercise the relevant election to terminate the corresponding portion of the capped call transactions). This activity could also cause or avoid an increase or a decrease in the market price of our common stock and, to the extent the activity occurs following conversion or during any observation period related to a conversion of notes, it could affect the number of shares of common stock that convertible noteholders receive upon conversion of the Convertible Notes.

The direction or magnitude of any potential effect that the transactions described above may have on the price of our common stock, if any, is uncertain and any of such effects could adversely affect the price of our common stock.

The loss of certain key personnel could negatively impact the operations and financial results of our business.

Our ability to successfully operate our business is dependent upon the efforts of certain key personnel of ours and there can be no assurance that they will be able to do so. It is possible that we will lose some key personnel, the loss of which could negatively impact our operations and profitability.

We may issue additional shares of common stock or preferred shares under an employee incentive plan which would dilute the interest of our stockholders.

Our Certificate of Incorporation authorizes the issuance of 200,000,000 shares of common stock, and 10,000,000 shares of preferred stock, in each case, par value \$0.0001 per share. We may issue a substantial number of additional shares of common stock or shares of preferred stock under an employee incentive plan. The issuance of additional common stock or preferred shares:

- may subordinate the rights of holders of common stock if one or more classes of preferred stock are created, and such preferred shares are issued, with rights senior to those afforded to common stock; and
- could cause a change in control if a substantial number of shares of common stock are issued, which may affect, among other things, our ability to use our net operating loss carry forwards, if any, and could result in the resignation or removal of our present officers and directors.

Our Certificate of Incorporation provides, subject to limited exceptions, that the courts of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our Certificate of Incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers and employees for breach of fiduciary duty and other similar actions may be brought in the state courts in the State of Delaware or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our Certificate of Incorporation. In addition, our Certificate of Incorporation provides that this choice of forum does not apply to any complaint asserting a cause of action under the Securities Act and the Exchange Act. Finally, our Certificate of Incorporation provides that federal district courts of the United States will be the exclusive forum for the resolution of any complaint asserting a cause of action under the Securities Act or the Exchange Act.

In March 2020, the Delaware Supreme Court issued a decision in *Salzburg et al. v. Sciabacucchi*, which found that an exclusive forum provision providing for claims under the Securities Act to be brought in federal court is facially valid under Delaware law. It is unclear whether this decision will be appealed, or what the final outcome of this case will be. We intend to enforce this provision, but we do not know whether courts in other jurisdictions will agree with this decision or enforce it.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision contained in the Certificate of Incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results, and financial condition.

Techniques employed by short sellers may drive down the market price of our common stock and/or spur litigation or regulatory action.

Short selling is the practice of selling securities that a seller does not own but rather has borrowed from a third party with the intention of buying identical securities back at a later date to return to the lender. Short sellers hope to profit from a decline in the value of the securities between the sale of the borrowed securities and the purchase of the replacement securities, as short sellers expect to pay less in that purchase than they received in the sale. As it is in short sellers' interest for the price of the security to decline, many short sellers publish, or arrange for the publication of, negative opinions and allegations regarding the relevant issuer and its business prospects in order to create negative market momentum and generate profits for themselves after selling a security short. These short attacks have, in the past, led to selling of shares in the market.

We have been the subject of negative publicity campaigns based on incomplete, outdated or misunderstood information. We do not believe there is any merit to these campaigns and we believe that their sole purpose was to benefit the short sellers of our securities. Furthermore, we believe that our responses to such campaigns, together with the substantial amount of publicly available information about us, sufficiently demonstrate the lack of merit of each claim. It is not clear what long-term effect such negative publicity could have on us and/or whether we will continue to be subject to short seller attacks from time to time in the future. If we were to become the subject of any additional unfavorable allegations, whether such allegations are proven to be true or untrue, we may have to expend significant resources to investigate such allegations and/or defend ourselves. While we would prefer to strongly defend against any such short seller attacks, we may be constrained in the manner in which we can proceed against the relevant short sellers by principles of freedom of speech, applicable state law or issues of commercial confidentiality. Such a situation

could be costly and time-consuming and could divert management’s attention from our day-to-day operations. Even if such allegations are ultimately proven to be groundless, allegations against us could severely impact the market price of our common stock and our business operations.

We believe that the several previously disclosed class action securities claims, the first of which was filed against us on May 14, 2021, are a result of these short seller reports. On May 5, 2021, we received a letter from the Atlanta regional office of the SEC, in connection with a non-public, fact-finding inquiry, requesting that we voluntarily produce certain specified information, to which we timely and voluntarily produced the requested information on July 14, 2021. Subsequently, the SEC had additional follow-up requests for further information, and we have timely and voluntarily responded to all such requests.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters, primary research facility, PLA reactive extrusion plant, tolling operation and our PHA demonstration plant are located in Bainbridge, Georgia, in approximately 200,000 square feet. Our PHA commercial production facility is located in Winchester, Kentucky in approximately 155,000 square feet.

The triple net lease under which we lease these properties, except for the PLA reactive extrusion plant we own, has an initial term through December 31, 2038 with four optional renewal terms of five years each.

Danimer Catalytic Technologies maintains offices and our Rinnovo pilot plant in Rochester, New York in approximately 26,000 square feet, which we are leasing through June 30, 2028 with one optional lease renewal term of five years.

ITEM 3. LEGAL PROCEEDINGS

Please refer to [Note 19](#) to the Consolidated Financial Statements for information regarding material legal proceedings.

In the ordinary course of business, we may be a party to various other legal proceedings from time to time.

ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Certain Information Regarding the Trading of Our Common Stock

Our Common Stock currently trades under the symbol “DNMR” on the New York Stock Exchange (“NYSE”). Through December 29, 2020, our common stock, units, and warrants were traded under the symbols “LOAK”, “LOAK-U”, and “LOAK-WS”, respectively, and these securities commenced public trading effective May 5, 2020. Upon the consummation of the Business Combination, we separated our units into their component units of one share of common stock and one-half warrant. On December 30, 2020, our warrants began trading on the NYSE under the symbol “DNMR-WS”. We redeemed these warrants on June 16, 2021, after which trading ceased.

Holders of Our Common Stock

As of March 28, 2023, there were 371 holders of record of shares of our common stock. These amounts do not include stockholders for whom shares are held in “nominee” or “street” name.

Recent Sales of Unregistered Equity Securities

During the year ended December 31, 2022, we did not issue or sell any unregistered securities.

Issuer Purchases of Equity Securities

During the quarter ended December 31, 2022, 90,167 shares were surrendered to us in connection with our payment of the tax withholding obligations of participants in connection with the partial vesting of their restricted stock awards.

Dividends

We have not paid any dividends on our common stock to date. It is our present intention to retain any earnings for use in our business operations, and, accordingly we do not anticipate that the board of directors will declare any dividends in the foreseeable future on our common stock.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and related notes appearing in Part II, Item 8 of this Report. The following discussion contains forward-looking statements that involve risks, uncertainties, and assumptions. See the section entitled "Cautionary Note Regarding Forward-Looking Statements." Actual results and timing of selected events may differ materially from those anticipated in the forward-looking statements as a result of various factors, including those set forth under the section entitled "Risk Factors" or elsewhere in this Report. Unless the context otherwise requires, references in this "Management's Discussion and Analysis of Financial Condition and Results of Operations" to "we", "us", "our", "Danimer", "Danimer Scientific", and the "Company" are intended to mean the business and operations of Danimer and its consolidated subsidiaries.

Introductory Note

The following discussion and analysis of our results of operations describes the business historically operated by Meridian Holdings Group and its subsidiaries ("Legacy Danimer") under the "Danimer Scientific" name as an independent enterprise prior to December 29, 2020.

On December 29, 2020, the registrant, Live Oak Acquisition Corp. ("Live Oak"), merged with and into Legacy Danimer, with Legacy Danimer surviving as the surviving company ("Business Combination") and as a wholly owned subsidiary of Live Oak, and changed its name from Live Oak Acquisition Corp. to Danimer Scientific, Inc. ("Danimer"). Live Oak was originally incorporated in the State of Delaware on May 24, 2019 as a special purpose acquisition company formed for the purpose of effecting a business combination with one or more businesses and completed its initial public offering in May 2020.

On August 11, 2021, we closed the acquisition of Danimer Catalytic Technologies in exchange for \$153.9 million in cash, gross of cash acquired, subject to certain customary adjustments as set forth in the merger agreement. Danimer Catalytic Technologies' financial results are included in those of the Company from that date forward. Danimer Catalytic Technologies utilizes feedstocks as an input into its proprietary thermal catalytic conversion process to produce a unique type of PHA or p(3HP) or otherwise referred to under its brand name as Rinnovo.

Overview

We are a performance polymer company specializing in bioplastic replacement for traditional petroleum-based plastics. We bring together innovative technologies to deliver biodegradable bioplastic materials to global consumer product companies. We believe that we are the only commercial company in the bioplastics market to combine the production of a base polymer along with the reactive extrusion capacity in order to give customers a "drop-in" replacement for a wide variety of petroleum-based plastics. We derive our revenue primarily from product sales of PHA- and PLA-based resins as well as from services such as contract research and development and tolling.

PHA-based Resins: We are a leading producer of polyhydroxyalkanoate ("PHA"), a key biodegradable ingredient in a wide range of engineered materials that are plastic alternatives, which we sell under the proprietary Nodax brand name, for use in a wide variety of plastic applications including straws and food containers, among other things. We make Nodax through a fermentation process where bacteria consume vegetable oil and make PHA within their cell walls as energy reserves. We harvest the PHA from the bacteria, then purify and filter the bioplastic before forming the PHA into pellets, which we combine with other inputs using a reactive extrusion process to manufacture formulated finished product. PHAs are a complete replacement for petroleum-based plastics where the converters do not have to purchase new equipment to switch to our new biodegradable plastic. Utilizing PHA as a base resin for a wide variety of application-specific engineered materials significantly expands the number of potential applications for bioplastics in the industry and enables us to produce resin that is not just compostable, but also fully biodegradable.

We recently began making PHA on a commercial scale. In December 2018, we acquired a fermentation facility in Winchester, Kentucky ("Kentucky Facility"). We embarked on a two-phase commissioning strategy for the Kentucky Facility, which expanded the capacity of the plant by 45 million pounds to total plant capacity up to 65 million pounds of finished product per year.

In November 2021, we broke ground on the construction of a PHA plant in Bainbridge, Georgia (“Greenfield Facility”). Through December 31, 2022, we have invested \$171.1 million in the Greenfield Facility, excluding capitalized interest and internal labor. The Greenfield Facility has an engineering cost estimate ranging from \$515 million to \$665 million and it will have a planned annual production capacity of approximately 125 million pounds of finished product. We have suspended construction of the Greenfield Facility and completion of the facility is contingent upon receiving additional financing.

We currently anticipate spending between \$140 million to \$220 million on the Rinnovo plant. Once the Rinnovo plant is completed and after making some additional investments in extrusion capacity, the Danimer network is expected to have production capacity of approximately 330 million pounds of PHA-based finished product resins when blended with other inputs. Danimer also expects to have approximately 60 million pounds of Rinnovo remaining to sell on a standalone basis or in formulations that don't include Nodax.

PLA-based Resins: Since 2004, we have been producing proprietary plastics using a natural plastic called polylactic acid (“PLA”) as a base resin. PLA has limited functionality in its unformulated, or “neat,” form. We purchase PLA and formulate it into bioplastic resins by leveraging the expertise of our chemists and our proprietary reactive extrusion process. Our formulated PLA products allow many companies to use renewable and compostable plastics to meet their customers’ growing sustainability needs. We were the first company in the world to create a bioplastic suitable for coating disposable paper cups to withstand the temperatures of hot liquids such as coffee. We have since expanded our product portfolio and now supply customers globally.

Research and Development (“R&D”) and Tolling Services: Our technology team partners with global consumer product companies to develop custom biopolymer formulations for specific applications. R&D contracts are designed to develop a formulated resin using PHA, PLA and other biopolymers that can be run efficiently on existing conversion equipment. We expect successful R&D contracts to culminate in supply agreements with the customers. Our R&D services thus not only provide revenue but also a pipeline of future products.

In addition to producing our own products, we also toll manufacture for customers that need our unique extruder or reactor setup for new or scale-up production. Our specialty tolling services primarily involve processing customer-owned raw materials to assist them in addressing their extrusion capacity constraints or manufacturing challenges.

Comparability of Financial Information

Our results of operations may not be comparable between periods as a result of the Business Combination, the acquisition of Danimer Catalytic Technologies in 2021 and the impairment of goodwill during 2022.

Key Factors Affecting Operating Results

We believe that our performance and future success depend on several factors that present significant opportunities for us but also pose risks and challenges, including those discussed below and in the section of this Report titled “*Risk Factors.*”

Factors Impacting Our Revenue

We derive our revenue from product sales of PHA- and PLA-based resins as well as from services such as R&D and tolling.

Now that we have completed Phase II of the Kentucky Facility, the most significant driver of PHA-based revenue is the pace of adoption of our materials and our ability to bring additional production capacity online, such as our Greenfield Facility. Our product revenue from PLA-based resins is primarily impacted by the effective launch of new product offerings in new markets by our customers as well as the ability of our suppliers to continue to grow their production capacity of neat PLA. Finally, our product revenue is impacted in the longer run by our ability to deliver biopolymer formulations that can be efficiently run on customer conversion equipment and meet customer application specifications and requirements as well as PHA-related license sales agreements.

We have a fairly low number of customers. In 2022, we had two customers that each individually accounted for more than 10% of total revenue and collectively represented 40% of total revenue. In 2021, we had two customers that each individually accounted for more than 10% of total revenue and collectively represented 35% of total revenue.

Our service revenue is primarily impacted by the timing of, and execution against, customer contracts. Research and development services generally involve milestone-based contracts to develop PHA-based solutions designed to a customer's specifications. Upon the completion of research and development contracts, customers generally have the option to enter into long-term supply agreements with us for the developed product solutions. Our ability to grow our service revenue depends on our ability to achieve a track record of developing successful biopolymer formulations for our customers and our ability to effectively transition those customer formulations to commercial scale production.

Factors Impacting Our Operating Expenses

Costs of revenue

Cost of revenue is comprised of costs of goods sold and direct costs associated with research and development service projects. Costs of goods sold consists of raw materials and ingredients, labor costs including stock-based compensation for production staff, related production overhead, rent and depreciation costs. Costs associated with research and development service contracts include labor costs, related overhead costs, rent, depreciation, amortization, and outside consulting and testing fees incurred in direct relation to specific service contracts.

Selling, general and administrative expense

Selling, general and administrative expense consists of salaries, marketing expense, corporate administration expenses, stock-based compensation not allocated to research and development or costs of revenue personnel, and elements of depreciation and amortization, rent and facility expenses that are not directly attributable to direct costs of production or associated with research and development activities.

Research and development expense

Research and development expense includes salaries, stock-based compensation, third-party consulting and testing fees, and rent and related facility expenses directly attributable to research and development activities not associated with revenue generating service projects.

Impacts Related to the COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of COVID-19 to be a global pandemic and recommended containment and mitigation measures worldwide. In response, government authorities have issued an evolving set of mandates, including requirements to shelter-in-place, curtail business operations, restrict travel and avoid physical interaction. These mandates and the continued spread of COVID-19 have disrupted normal business activities in many segments of the global economy, resulting in weakened economic conditions. Government mandates have been lifted by certain public authorities and economic conditions have improved in certain sectors of the economy. Certain regions of the world have experienced increasing numbers of COVID-19 cases, however, and if this continues and if public authorities intensify efforts to contain the spread of COVID-19, normal business activity may be further disrupted and economic conditions could weaken.

Our ability to continue to operate without any significant negative impacts will in part depend on our ability to protect our employees and our supply chain. We have endeavored to follow actions recommended by governments and health authorities to protect our employees, with particular measures in place for those working in our manufacturing and laboratory facilities. We have been able to broadly maintain our operations, and we intend to continue to work with our stakeholders (including customers, employees, suppliers and local communities) to responsibly address this global pandemic. However, uncertainty resulting from the global pandemic could result in an unforeseen disruption to our supply chain (for example a closure of a key manufacturing or distribution facility or the inability of a key material or transportation supplier to source and transport materials) or delay or defer future orders or new contracts that could impact our operations.

For additional information on risk factors that could impact our results, please refer to "Risk Factors" located elsewhere in this Report.

Current Developments

During our fiscal year, we made further inroads in our mission to create biodegradable consumer packaging and other products which address the global plastics waste crisis, building on our team's many accomplishments since we became a public company in late 2020 by:

- entering into partnership agreements with Kemira and Hyundai;
- signing a distribution agreement with Formerra (formerly Avient Biosciences);
- increasing our PHA production capacity and completing commissioning of our Phase II Kentucky Facility; and
- making additional progress in negotiating development and supply agreements with our blue-chip customers.

Russia & Ukraine Conflict

With respect to the war in the Ukraine, our business and operational environment is impacted by, among other things, responsive governmental actions including sanctions imposed by the U.S. and other governments.

While we do not have operations in either Russia or Ukraine, we have experienced a decline in sales due to the conflict, specifically sales of some of our PLA products. We are unsure if this business will return in whole or in part in the future. We have also experienced supply chain challenges and increased logistics and raw material costs which we believe may be due in part to the negative impact on the global economy from the ongoing war in Ukraine, including but not limited to canola oil, which our PHA production currently uses as a feedstock. Prior to the Russian invasion, Ukraine was a significant producer of canola. While we do not source from Ukraine, we believe canola oil prices have increased globally as a result of the invasion. We have placed medium-term (less than a year) orders for canola oil to reduce our exposure to shortages and price increases.

The extent to which the conflict may continue to impact Danimer in future periods will depend on future developments, including the severity and duration of the conflict, its impact on regional and global economic conditions, and the extent of supply chain disruptions. We will continue to monitor the conflict and assess the related sanctions and other effects and may take further actions if necessary.

Critical Accounting Policies

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the reported amount of assets and liabilities, the disclosure of contingent assets and liabilities and the reported amounts of revenue and expenses during the reported periods. The more critical accounting estimates include estimates related to revenue recognition, stock-based compensation, impairment of goodwill and long-lived assets, convertible debt, and business combinations. We also have other key accounting policies, which involve the use of estimates, judgments and assumptions that are significant to understanding our results, which are described in [Note 2](#) to our Consolidated Financial Statements.

Revenue Recognition

We recognize revenue from product sales and services in accordance with FASB ASC Topic 606, *Revenue from Contracts with Customers* ("ASC 606"). Under ASC 606, we recognize revenue when our customer obtains control of promised goods or services, in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. At contract inception, we assess the goods or services promised within each contract and determine which are performance obligations and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

We derive our revenues primarily from: 1) product sales of compostable resins; and 2) research and development ("R&D") services related to developing customized formulations of biodegradable resins based on PHA as well as tolling revenues.

We primarily produce and sell formulated resin pellets and we typically recognize revenue for these sales upon shipment. Due to the highly specialized nature of our products, returns are infrequent and have historically been immaterial. We offer a standard quality assurance warranty related to the fitness of our finished goods. There are no forms of variable consideration such as discounts, rebates, or volume discounts that we estimate to reduce our transaction price.

R&D service revenues generally involve milestone-based contracts under which we work with a customer to develop a PHA-based material designed to the customer's specifications or needs. We recognize revenue for these R&D services over time with progress measured using personnel hours incurred to date as a percentage of total estimated personnel hours for each performance obligation identified within the contract. Upon completion of the R&D services, the customers have an option to enter into long-term supply agreements with us for the product(s) that were developed within the respective contracts. We concluded these customer options were marketing offers, not separate performance obligations, since the options did not provide a material right to any of our customers.

Stock-based Compensation

We have granted stock-based awards to employees with vesting requirements based on duration of service only, a combination of market-based and service-based conditions, and a combination of performance-based and service-based conditions. We recognize expense associated with service-based only condition awards on a straight-line basis over the requisite service period. We recognize expense associated with awards with market-based or performance-based vesting conditions on a straight-line basis over the longest of the explicit, implicit or derived service period term of the award.

We use a Black-Scholes option pricing model to value stock option awards, and we value for restricted stock (and restricted stock unit) awards without a market-based component at the price of our common stock. For awards with a market-based component, we use a Monte Carlo simulation. Instruments that may be settled in cash are recorded as liabilities and are revalued each period. All other instruments qualify as equity and are valued only at the grant date. For more information about our methods of valuation, see [Note 3](#) to the Consolidated Financial Statements.

We record the effects of forfeitures as they occur.

Impairment of Goodwill and Long-Lived Assets

We test goodwill for impairment annually as of November 1st or more frequently if events or circumstances indicate possible impairment. Other long-lived assets, such as property, plant and equipment and finite-lived intangible assets, are amortized over their respective estimated useful lives and reviewed for impairment if events or circumstances indicate possible impairment.

We may elect to evaluate qualitative factors to determine if it is more likely than not that the fair value of a reporting unit or fair value of our finite lived intangible assets is less than its carrying value. If the qualitative evaluation indicates that it is more likely than not that the fair value of a reporting unit or indefinite lived intangible asset is less than its carrying amount, a quantitative impairment test is required. Alternatively, we may bypass the qualitative assessment for a reporting unit or indefinite lived intangible asset and directly perform the quantitative assessment.

During 2022, as a result of a sustained decline in our market capitalization level below our book equity value and other macroeconomic factors, we noted that there were indicators that an impairment loss may have occurred. Accordingly, we performed an interim quantitative impairment assessment related to the aforementioned triggering event and determined that an impairment existed. We recorded a goodwill impairment charge of \$62.7 million during the period.

As of December 31, 2022, we performed a recoverability test over our long-lived assets using estimated undiscounted cash flows over the weighted average useful lives of our assets and determined that those cash flows were greater than the carrying amounts of our long-lived assets, indicating no impairment.

Convertible Debt and Capped Call

We elected the early adoption of Accounting Standards Update 2020-06, Debt - *Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)* ("ASU 2020-06") effective January 1, 2021. This adoption had no impact on our consolidated financial statements prior to the issuance of our convertible debt on December 21, 2021.

We reviewed the applicable models under the simplified guidance and determined that this borrowing should be accounted for as debt and should be presented at stated carrying value, net of issuance costs. Additionally, we determined that since the conversion feature in the Convertible Notes is indexed solely in our own common stock, and since we retain the option to settle the Convertible Notes in shares, the conversion feature qualified for a "scope exception" to treatment as a derivative since the conversion feature qualifies as "fixed for fixed", meaning the settlement is equal to the difference between a fixed monetary amount of convertible notes and the fair value of a fixed number of our shares. Therefore, we did not separately account for the conversion feature as a derivative.

While the Convertible Notes are subject to redemption at the option of the noteholder in certain situations, we concluded that the risks associated with the redemption provisions are clearly and closely associated with the risks associated with the Convertible Notes themselves since the Convertible Notes were not issued at a “substantial discount or premium”, and since the redemption provisions include only principal and accrued interest and are not adjusted based on any index other than our common stock.

In conjunction with the convertible debt, we entered into capped call transactions in which we purchased a call option to receive shares of our common stock. The capped call options are legally separate from the convertible debt, and we accounted for the capped call options separately from the convertible debt. The capped call options are indexed solely to our own common stock and classified in stockholders’ equity since we retain the right to receive shares, at our option, if we exercise the capped call options. We recorded the premiums paid for the capped call options, equal to their fair value at inception, as a reduction to additional paid-in capital.

Business Combinations

We recognize assets acquired and liabilities assumed at their estimated acquisition date fair values, with the excess of purchase price over the estimated fair values of identifiable net assets recorded as goodwill. Assigning fair values may require us to make significant estimates and assumptions regarding the fair value of identifiable intangible assets, property, plant and equipment, or other assets or liabilities. We may refine these estimates if necessary over a period not to exceed one year by taking into consideration new information that, if known at the acquisition date, would have affected the fair values recognized for assets acquired and liabilities assumed.

Significant estimates and assumptions are used in estimating the value of acquired identifiable intangible assets, including estimating future cash flows based on forecasted revenues and EBITDA margins that we expect to generate following the acquisition and applying an appropriate discount rate to estimate a present value of those cash flows and determining their useful lives. These assumptions are forward-looking and their realization will be affected by future economic and market conditions.

Recent Accounting Pronouncements

A discussion of recently issued accounting standards applicable to us is included in [Note 2](#) to our Consolidated Financial Statements.

Consolidated Results of Operations for the Years Ended December 31, 2022 and 2021

<i>(in thousands)</i>	Twelve Months Ended December 31,		
	2022	2021	Change
Revenue:			
Products	\$ 48,420	\$ 50,769	\$ (2,349)
Services	4,798	7,980	(3,182)
Total revenue	53,218	58,749	(5,531)
Cost of revenue			
Gross profit	(10,414)	884	(11,298)
Gross profit percentage	-19.6%	1.5%	
Operating expense:			
Selling, general and administrative	81,589	80,004	1,585
Research and development	31,939	20,270	11,669
Loss on sale of assets	1	82	(81)
Impairment of long-lived assets	63,491	-	63,491
Total operating expenses	177,020	100,356	76,664
Loss from operations	(187,434)	(99,472)	(87,962)
Nonoperating income (expense):			
Gain on remeasurement of private warrants	9,366	27,767	(18,401)
Interest, net	(1,723)	(763)	(960)
Gain on forgiveness of debt	-	1,776	(1,776)
Loss on loan extinguishment	(1,500)	(2,604)	1,104
Other, net	723	(44)	767
Total nonoperating income (expense):	6,866	26,132	(19,266)
Loss before income taxes	(180,568)	(73,340)	(107,228)
Income taxes	810	13,233	(12,423)
Net loss	\$ (179,758)	\$ (60,107)	\$ (119,651)

Revenue

Revenue decreased in 2022 as compared to 2021, driven by a year-over-year 12.3% decrease in shipment volume offset by an increase in our weighted average selling price by 4.7% for the same periods. This decrease in product revenue was primarily attributable to a decrease in PLA-based product sales of \$9.9 million, which was partially offset by an increase in PHA-related sales of \$7.3 million. This increase in PHA-based product sales was the result of the continued increase of orders filled by our Kentucky Facility. The decrease in PLA-based product sales was primarily the result of the conflict in Ukraine. The decrease in service revenue relates primarily to a \$2.6 million decrease in revenue from research and development contracts. We recognize revenue for these R&D services over time with progress measured based on personnel hours incurred to date as a percentage of total estimated personnel hours for each performance obligation identified within the contract, and we incurred fewer such hours in the current year as certain projects neared completion.

We had two customers that accounted for 40% and 35% of total revenue during 2022 and 2021, respectively.

Cost of revenue and gross profit

Cost of revenue in 2022 increased 10% compared to 2021. The increase in cost of revenue is primarily a result of the cost of PHA-based products representing a significantly larger portion of our total cost of revenue during 2022 than in 2021. The average cost per pound of PHA-based products sold in 2022 was significantly higher than that of PLA-based products due to (1) increased depreciation costs as we placed additional PHA production capacity in service and (2) elevated per-unit fixed-cost absorption at our Kentucky Facility as we ran these new assets at less than full capacity while scaling up production. Included in the increase in cost of revenue was a \$4.2 million increase in depreciation expense and a \$0.6 million increase in rent expense.

We anticipate that our per-unit fixed-cost absorption will improve as rent, depreciation and other fixed costs become a smaller portion of our overall cost of revenue as PHA output at the Kentucky Facility continues to increase. While it is not practicable to predict precisely when particular production volume levels will be achieved or sustained, nor to project our fixed costs with precision as we continue to innovate in our production processes, we expect that this improvement in per-unit cost absorption will continue until we reach full utilization. Beyond that point, incremental improvements in per-unit cost absorption would require implementation of additional capacity.

Operating expense

The increase in selling, general and administrative expense in 2022 as compared to 2021 was due primarily to an increase in office expenses of \$1.5 million, primarily driven by recruiting expenses, property tax expense and information technology expenses. Additional increases related to \$1.3 million in property and other insurance expenses, \$0.6 million in stock-based compensation and \$0.2 million in rent expense. These increases were offset by decreases of \$0.8 million in compensation and benefits, \$0.7 million in accounting expense and \$0.5 million in legal expense.

The increase in research and development expense year over year was primarily due to the incremental increase of \$6.1 million of R&D expense related to Danimer Catalytic Technologies (including \$4.3 million of depreciation and amortization), an increase of \$2.9 million of compensation and benefits and stock-based compensation costs related to additional headcount in the research and development areas, \$1.2 million related to a collectability reserve against an R&D contract asset, \$0.6 million in costs related to certain R&D materials for trials, \$0.4 million in consulting services and fees related to Danimer Catalytic Technologies and regulatory consulting and \$0.3 million in incremental rent costs related to Danimer Catalytic Technologies.

Impairment of long-lived assets

The impairment of long-lived assets primarily relates to the goodwill impairment loss recorded during the current year period due to the continuation of a sustained decline in our market capitalization level below our book equity value and other macroeconomic factors as described above.

Gain on remeasurement of private warrants

The gain on remeasurement of private warrants represents a decrease in the fair value of each of the 3.9 million outstanding private warrants due primarily to a decrease in the market price of our common stock during the period. The prior year period remeasurement gain was also due to the common stock price decrease during the prior year period.

Interest, net

Net interest expense in 2022 increased by \$1.0 million as compared to 2021. This increase was primarily from the issuance of our \$240 million principal amount 3.250% Convertible Notes in December 2021, which was offset by interest income earned.

Gain on forgiveness of debt and loss on extinguishment of debt

During 2022, we recognized a loss of \$1.5 million due to the write-off of unamortized debt issuance costs and other fees associated with the termination of our credit facility with Truist. During 2021, we recognized a loss of \$2.6 million due to the write-off of unamortized debt issuance costs and prepayments and other fees related to the voluntary pay off of our \$30 million term loan entered into in 2019 (“2019 Term Loan”), which was partially offset by the \$1.8 million gain recognized from the forgiveness of our PPP Loan.

Income taxes

In 2022, we had a tax benefit of \$0.8 million as compared to a \$13.2 million benefit in 2021. The benefit in the prior year related to the release of a portion of our valuation allowance for certain of our deferred tax assets that we expect to realize as a result of the deferred tax liabilities that were recorded in connection with the acquisition of Danimer Catalytic Technologies. Our effective tax rates differed from the federal statutory rate of 21% due to our substantial valuation allowance against our deferred tax assets in the current year and due to our net loss position and maintaining a full valuation allowance, other than as noted in connection with the acquisition of Danimer Catalytic Technologies in the prior year.

Net loss

We reported a net loss of \$179.8 million in 2022 as compared to a net loss of \$60.1 million in 2021. The increase in net loss in 2022 as compared to 2021 was primarily attributable to the impairment of goodwill, a smaller gain on the remeasurement of private warrants and increases in operating expenses and costs of sales, as discussed in the sections above.

Liquidity and Capital Resources

Our primary sources of liquidity are equity issuances and debt financings. As of December 31, 2022, we had \$62.8 million in cash and cash equivalents and working capital of \$99.8 million. As of December 31, 2021, we had \$286.5 million in cash and cash equivalents and working capital of \$296.9 million. While we believe we have developed the capabilities to generate revenue that will eventually be sufficient to cover our ongoing operating costs, we are currently experiencing a period of low sales volume. We also continue to incur significant capital expenditures resulting from the ongoing expansion and construction of our manufacturing and production facilities.

We broke ground on our Greenfield Facility construction ahead of schedule in November 2021 and started placing orders for long-lead time equipment items to mitigate the impacts of ongoing inflation and delivery delays that may result from global supply chain challenges. The Greenfield Facility has an engineering cost estimate ranging from \$515 million to \$665 million. As of December 31, 2022, we have invested \$171.1 million of capital, excluding capitalized interest and internal labor, for the Greenfield Facility. We have currently suspended construction of the Greenfield Facility and completion of the facility is contingent upon receiving additional financing. We believe we have adequate liquidity to fund our operations for the next twelve months.

2022 Debt Financings

New Market Tax Credits

During 2022, we entered into an additional New Market Tax Credit (“NMTC”) agreement with various unrelated third-party financial institutions, which then invest in certain investment funds. The gross proceeds from the arrangement were \$24.7 million. In conjunction with the financing arrangement, we loaned money to the investment funds in the amount of \$18.0 million, which was recorded as a leveraged loan receivable. These transactions resulted in a net cash inflow of \$6.7 million. Each investment fund then contributed the funds from our loan and the investor’s investment to a special purpose entity, which then in turn loaned the contributed funds to a wholly owned subsidiary. We expect these borrowings, and our related leveraged loans to the investment funds, will be forgiven in 2029.

2021 Debt Financings

3.25% Convertible Senior Notes

On December 21, 2021, we issued \$240 million principal amount 3.250% Convertible Senior Notes due 2026 (“Convertible Notes”) and governed by an indenture (“Indenture”).

The Convertible Notes are our senior, unsecured obligations and are (i) equal in right of payment with our existing and future senior, unsecured indebtedness; (ii) senior in right of payment to our existing and future indebtedness that is expressly subordinated to the Convertible Notes; (iii) effectively subordinated to our existing and future secured indebtedness, to the extent of the value of the collateral securing that indebtedness; and (iv) structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables.

The Convertible Notes accrue interest at a rate of 3.250% per annum, payable semi-annually in arrears on June 15 and December 15 of each year. The Convertible Notes will mature on December 15, 2026. Before June 15, 2026, noteholders have the right to convert their Convertible Notes only upon the occurrence of certain events. Starting on June 15, 2026, noteholders may elect to convert their Convertible Notes at any time until the close of business on December 11, 2026. We will settle conversions by paying or delivering, as applicable, cash, shares of our common stock or a combination of cash and shares of our common stock, at our election. The initial conversion rate is 92.7085 shares of common stock per \$1,000 principal amount of Convertible Notes, or approximately \$10.79 per share of common stock. The conversion rate and conversion price will be subject to customary adjustments upon the occurrence of certain events. In addition, if certain corporate events that constitute a “Make-Whole Fundamental Change” (as defined in the Indenture) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

The Convertible Notes will be redeemable at our option between December 19, 2024, and October 20, 2026, but only if certain liquidity conditions are satisfied and the last reported sale price per share of our common stock exceeds 130% of the conversion price on (i) each of at least 20 trading days during the 30 consecutive trading days ending on the trading day before the date we send the related redemption notice; and (ii) the trading day immediately before the date we send such notice. However, we may not redeem less than all of the outstanding Convertible Notes unless at least \$100.0 million aggregate principal amount of Convertible Notes are outstanding and not called for redemption as of the time we send the related redemption notice. The redemption price will be a cash amount equal to the principal amount of the Convertible Notes to be redeemed, plus any accrued interest. In addition, calling any Convertible Note for redemption will constitute a Make-Whole Fundamental Change with respect to that note, in which case the conversion rate applicable to the conversion of that note will be increased in certain circumstances.

Capped Calls

Also in December 2021, in connection with the Convertible Notes, we purchased capped calls (“Capped Calls”) with certain well-capitalized financial institutions for \$35 million. The Capped Calls were structured to partially offset the increase in the outstanding number of shares of our common stock should we settle the Convertible Notes in shares, or to reduce the net cash outlay required should we settle the Convertible Notes in cash. The Capped Calls are call options that permit us, at our option, to require the counterparties to deliver to us shares of our common stock.

The number of shares to be delivered upon such exercise is dependent on the market value of our common stock at the time of exercise, subject to a cap initially equal to \$16.92, and an initial strike price of \$10.79 per share. The cap and strike price are subject to adjustment in response to specified changes in our capitalization such as stock splits. Considering these unadjusted figures and assuming a cash settlement of the principal amount of the Convertible Notes upon a conversion, if we settle the incremental value of the Convertible Notes upon conversion with shares when the market price (as measured according to the terms of the Capped Call) of our common stock is between \$10.79 and \$16.92, we will be able to call shares equal to the number of incremental shares issuable under the Convertible Notes. If such stock price is less than that, then the Capped Calls are “out of the money” and we would not exercise them. To the extent such stock price is greater than \$16.92, we would be unable to call enough shares under the Capped Calls to entirely offset the number of incremental shares to be issued by us. We may net-settle the Capped Calls and receive cash instead of shares, and the Capped Calls have an outside expiration date of April 12, 2027.

2022 Equity Issuances

On September 7, 2022, we entered into an equity distribution agreement (“Equity Distribution Agreement”) with Citigroup Global Markets Inc. as manager, under which we may issue and sell shares of our common stock “at the market” from time-to-time with an aggregate offering price of up to \$100 million (collectively the “ATM Offering”). Under the Equity Distribution Agreement, the manager may sell small volumes of our common stock at the prevailing market price, during such times and at such terms as we have predesignated. We have no obligation to sell any shares and may at any time suspend offers and sales that are part of the ATM Offering or terminate the Equity Distribution Agreement. During the year ended December 31, 2022, we issued 212,604 shares at an average price of \$4.15 per share resulting in proceeds of \$0.9 million. Additionally, we incurred issuance costs of \$1.1 million, which were primarily one-time costs, but which also included less than \$0.1 million in commissions to the manager. As of December 31, 2022, \$99.1 million remains available for distribution under the Equity Distribution Agreement.

2021 Equity Issuances

At December 31, 2020, there were 16,000,000 outstanding warrants to purchase shares of our common stock. Each warrant entitled the holder to purchase one share of our common stock at a price of \$11.50. During 2021, warrant holders exercised 12,033,169 warrants. Net of fees, we collected \$138.2 million in connection with these exercises.

Cash Flows for 2022 and 2021

The following table summarizes our cash flows from operating, investing and financing activities:

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Net cash used in operating activities	\$ (61,837)	\$ (62,963)
Net cash used in investing activities	\$ (182,482)	\$ (336,168)
Net cash provided by financing activities	\$ 21,752	\$ 306,202

Cash flows from operating activities

The \$1.1 million period-to-period decrease in cash flows used in operating activities shown above was primarily attributable to the decline in gross profit related to the scale up of the Kentucky Facility, an increase in operating expenses between the periods, and a \$10.1 million decrease in cash used to fund changes in working capital.

Cash flows from investing activities

The \$153.7 million period-to-period decrease in cash flows used in investing activities was primarily due to the prior year acquisition of Danimer Catalytic Technologies of \$151.2 million, net of cash acquired. We invested \$18.0 million in leveraged loans receivable as part of our current period NMTC transaction. As compared to prior year, we had an increase of \$27.2 million in spending incurred in conjunction with the construction of the Greenfield Facility, which was offset by a decrease of \$84.6 million related to the construction of Phase II of our Kentucky Facility, which has recently been completed.

Cash flows from financing activities

For 2022, net cash provided by financing activities was \$21.8 million, which consisted primarily of:

- Proceeds of \$24.7 million from a NMTC arrangement;
- Payments of debt issuance costs of \$1.6 million; and
- Payments related to long-term debt of \$1.5 million.

For 2021, net cash provided by financing activities was \$306.2 million, which consisted primarily of:

- Proceeds of \$240.2 million from the issuance of the Convertible Notes, offset by \$35.0 million used to purchase capped call options;
- Proceeds of \$138.2 million from exercise of our publicly-traded warrants;
- Payments on long-term debt of \$27.2 million, primarily driven by the voluntary repayment of the 2019 Term Loan in the amount of \$27 million; and
- Payments of debt issuance costs, primarily related to the Convertible Notes, of \$10.4 million.

Material Cash Requirements

We enter into a variety of contractual obligations in addition to capital expenditures as part of our normal operations. As of December 31, 2022, we have (i) debt obligations related to our \$240.0 million Convertible Notes which mature in 2026 and other non-NMTC debt obligations of \$12.6 million, which include cash principal and interest payments through 2026, (ii) operating and finance lease obligations that total \$54.6 million in cash payments through 2038, and (iii) purchases related to our capital projects for engineering services, construction services, construction materials and equipment purchases of \$20.6 million, which we will incur during 2023 and beyond. We expect to fund these cash requirements from cash on hand.

Off-balance Sheet Arrangements

At December 31, 2022, we do not have or engage in any off-balance sheet arrangements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are a smaller reporting company, as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, for this reporting period and are not required to provide the information required under this item.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

See financial statements included in Item 15, “Exhibits, Financial Statement Schedules,” of this Report.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer (“Certifying Officers”) carried out an evaluation of the effectiveness of the design and operation of the Company’s disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act as of December 31, 2022 and concluded our disclosure control and procedures were effective.

Management’s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. We assessed the effectiveness of our internal control over financial reporting at December 31, 2022. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013 framework). After doing so, management concluded that, at December 31, 2022, our internal control over financial reporting was effective.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company’s internal control over financial reporting identified in connection with the evaluation required by Rules 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the Company’s fourth fiscal quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Danimer's directors and executive officers and their ages as of March 28, 2023 are as follows:

Name	Age	Position
<i>Executive Officers</i>		
Stephen E. Croskrey*	63	Chief Executive Officer, Director and Chairman of the Board
Michael A. Hajost	59	Chief Financial Officer
Phillip Van Trump	46	Chief Science & Technology Officer
Michael Smith	54	Chief Operating Officer
Scott Tuten	47	Chief Marketing & Sustainability Officer
<i>Non-Employee Directors</i>		
John P. Amboian ⁽¹⁾⁽³⁾	61	Director
Philip Gregory Calhoun ⁽²⁾	60	Director
Cynthia Cohen ⁽¹⁾	70	Director
Richard J. Hendrix ⁽²⁾	57	Director
Gregory Hunt ⁽¹⁾	66	Director
Allison Leopold Tilley ⁽²⁾	58	Director
Dr. Isao Noda ⁽³⁾	72	Director
Stuart Pratt*	77	Director

* Not an independent director, due to the nature of the relationship with Danimer.

(1) Member of the audit committee.

(2) Member of the compensation committee.

(3) Member of the nominating and corporate governance committee.

Executive Officers

Stephen E. Croskrey. Mr. Croskrey has served as chairman of the Board and chief executive officer of Danimer since December 2020. From February 2016 through the Business Combination, Mr. Croskrey was chief executive officer and a member of the board of directors of Legacy Danimer. Mr. Croskrey is a business leader with over 30 years of experience in overseeing the strategic direction and operations of companies that manufacture and market a variety of products such as industrial fibers, and law-enforcement gear. From 1999 to 2005, Mr. Croskrey served as the president and chief executive officer of Armor Holdings Products, LLC, a major manufacturer of military, law enforcement, and personnel safety equipment. During such tenure its annual revenue increased from \$45 million to over \$300 million as a result of him overseeing the acquisition and integration of 13 companies and implementing associated organic growth initiatives. Mr. Croskrey has also held senior executive positions at Allied Signal and Mobil Oil. Mr. Croskrey received an MBA degree from the Kellogg School of Management at Northwestern University. He also received a Bachelor of Science degree in Engineering from the United States Military Academy at West Point where he was also commissioned as an officer in the U.S. Army and served as a company commander, attaining the rank of captain during his six years of active duty. He is well-qualified to serve on the Board due to his extensive leadership, operational and advisory background as well as his significant strategic experience in acquiring and integrating companies.

Michael A. Hajost. Mr. Hajost has served as chief financial officer since March 2022. Between January 2019 and February 2022, Mr. Hajost was Executive Vice President, Finance, and Chief Financial Officer of Strategic Materials, Inc., a comprehensive glass recycler in North America with approximately 900 employees in over 50 locations. Prior to Strategic Materials, from 2015 to 2018, Mr. Hajost was Senior Vice President, Finance, and Chief Financial Officer of Accuride Corporation (NYSE: ACW), a global leader in the design and manufacture of wheel components for the commercial truck, passenger car and off-road vehicle industries. From 2008 to 2015, Mr. Hajost was Vice President, Treasury and Investor Relations, at Carpenter Technology Corporation (NYSE: CRS), a leading international manufacturer of specialty alloys and engineered products. Mr. Hajost's corporate career was preceded by five years of service as an officer in the U.S. Army where he attained the rank of Captain. Mr. Hajost obtained his M.B.A. from the Booth School of Business at the University of Chicago in 1992 and graduated from the United States Military Academy with a Bachelor of Science degree in Engineering in 1985.

Phillip Van Trump. Mr. Van Trump has been Danimer’s chief science and technology officer since December 2020, and prior to that had been Legacy Danimer’s chief technology officer since 2014. Mr. Van Trump manages research and development, product development, regulatory affairs and intellectual property for Danimer. Prior to these roles, Mr. Van Trump worked in a variety of positions within Legacy Danimer, performing bench-scale to pilot-level research as well as playing an integral role in the procurement of equipment and laboratory personnel to advance Danimer’s objectives. He holds a Bachelor of Science in molecular biology and microbiology from the University of Central Florida and an MBA from Emory University.

Michael Smith. Mr. Smith has been Danimer’s chief operating officer since December 2020 and prior to that had been Legacy Danimer’s chief operating officer since 2007. He has significant manufacturing experience, especially in implementing lean manufacturing techniques, and is integral to the continuous-process improvement of Danimer’s manufacturing operations. Prior to joining Legacy Danimer, Mr. Smith held high-level manufacturing positions at Ingersoll Rand from 1991 to 1996, Amoco from 1996 to 1998, British Petroleum from 1998 to 2004, and Propex from 2004 to 2007. He holds a Bachelor of Science degree in industrial and systems engineering from the Georgia Institute of Technology and has received extensive training in the Six Sigma Tools process controls and lean manufacturing techniques.

Scott Tuten. Mr. Tuten has been Danimer’s chief marketing and sustainability officer since December 2020 and prior to that had been Legacy Danimer’s chief marketing officer since 2006. Mr. Tuten has significant experience in the fields of international logistics, supply-chain management, transportation, inventory control, operations, sales and warehousing. Mr. Tuten joined Danimer in 2006 as vice president of operations and was quickly promoted to senior vice president of operations. In 2014, Mr. Tuten was appointed chief marketing officer to manage overall sales and marketing. He holds a Bachelor of Business Administration in logistics and an M.B.A. from Georgia Southern University.

Non-Employee Directors

John P. Amboian. Mr. Amboian served as Live Oak’s Chairman from May 2020 to December 2020 and continues to serve on the Board following the completion of the Business Combination. Mr. Amboian is a business leader with over 30 years of experience in mergers and acquisitions, capital management, product development, branding and distribution for both privately held and public companies, across multiple industries. He served as Chairman and Chief Executive Officer of Nuveen Investments, Inc., or Nuveen (formerly NYSE: JNC), from 2007 to 2016. He was President of Nuveen from 1999 through 2007 after joining as its Chief Financial Officer from 1995 to 1999. During his time in leadership positions at Nuveen, Mr. Amboian participated in over 20 M&A and capital markets transactions, in addition to playing a leading role in Nuveen’s sale to an investment group led by Madison Dearborn, in 2007 and Nuveen’s sale process to TIAA (Teacher’s Insurance and Annuity Association of New York) in 2014. Mr. Amboian served on the Nuveen Mutual Funds board from 2007 through 2016 in addition to serving on Nuveen Investments’ public board from 1996 through 2007. Prior to Nuveen, Mr. Amboian was the Chief Financial Officer and Senior Vice President of Strategy of the Miller Brewing Company. He began his career in Corporate and International Finance at Kraft Foods, Inc., where he ended his tenure as Treasurer. Since 2013, Mr. Amboian has served at Madison Dearborn Partners as an industry advisor and is an Independent Director of the general partnership of Adams Street Partners, a private-markets investment firm. Additionally, Mr. Amboian is Chairman of Evanston Capital, a hedge fund alternative investment manager, and since 2017 has been a senior advisor to Estancia Capital. Since 2018, he chairs the board of North Square Investments, a boutique asset management firm. He is also on the advisory board of Cresset Capital Management, a wealth management firm. He advises several small businesses on organic and inorganic growth initiatives through JA Capital Advisors, LLC. He received both his Bachelor’s degree and his M.B.A. from the University of Chicago. He is well-qualified to serve on our board due to his extensive finance, investment and operational background.

Philip Gregory Calhoun. Mr. Calhoun has been a member of the Board since December 2020, and prior to that, a member of Legacy Danimer’s board of directors from 2014 to December 2020, and was a director of Danimer’s Meredian, Inc. and Danimer Scientific, L.L.C. subsidiaries prior to their merger in June 2014. Mr. Calhoun is president and chief executive officer of Circle C. Farms, Inc., a commercial farm and cattle ranch located in Colquitt, Georgia, where Mr. Calhoun has worked since 1981. Mr. Calhoun also is the sole proprietor of GC Sprayer Service, Inc., a crop-dusting operation in Colquitt, Georgia. Mr. Calhoun also serves as a director of First National Bank of Decatur County located in Bainbridge, Georgia, Miller County Gin in Colquitt, Georgia and American Peanut Growers, a peanut-shelling plant in Donalsonville, Georgia. He is well-qualified to serve on the Board and all of its board committees due to his extensive commercial and operational background.

Cynthia Cohen. Ms. Cohen has been a member of the Board since August 2022. Ms. Cohen has more than 20 years of business strategy, marketing, and business operations experience. In October 2018, she founded IMPACT 2040, a strategy consulting firm serving retailers, consumer brands, manufacturers, and digital technology companies, and currently acts as its President. Ms. Cohen is an advisor and board member to several start-ups and private emerging growth companies in technology and consumer product businesses, including Scroobious, where she has been an advisory board member since September 2020, Knock Inc., where she has served on the board of advisors since January 2016, AnswerLab, where she has served on the board of advisors since June 2014, and Sophelle, where she has served on the board of advisors since November 2012. Ms. Cohen has also served on several public company boards of directors, including Equity One, where she was a board member from May 2006 through March 2017, Steiner Leisure Services, where she served as a board member and chairman of the nominating and governance committee from May 2006 through December 2015, and Bebe Stores, Inc., where she served as the lead independent director from July 2001 through July 2014. Prior to founding IMPACT 2040, and the predecessor firm Strategic Mindshare in June 1990, she was a Partner in Management Consulting at Deloitte & Touche LLP. Ms. Cohen received her Bachelor of Science in Business Administration - Finance and Marketing from Boston University, for which she has been a member of the Board of Trustees since May 2020. She is well-qualified to serve on the Board due to her extensive background in the consumer products industry, as a strategy consultant, and as a prior board member of several public companies.

Richard Hendrix. Mr. Hendrix served as Live Oak's Chief Executive Officer and as a director on the Board from May 2020 to December 2020, and continues to serve on the Board following the completion of the Business Combination. He has significant experience in executive leadership, corporate strategy, M&A, capital markets and corporate finance for public companies. Over the course of his career, Mr. Hendrix has worked extensively with issuers and investors focused on companies in the financial services, real estate, energy, industrial, and business and consumer services sectors. He has led dozens of initial equity offerings for founder-led and Sponsor-backed companies primarily within the banking, insurance and real estate sectors. Additionally, Mr. Hendrix has considerable experience advising chief executives, boards of directors and large shareholders regarding strategy, capital structure and capital access. He has significant leadership experience in the financial industry, having served as Chief Executive Officer of FBR & Co., or FBR (formerly Nasdaq: FBRC), a capital markets firm, from 2009 to 2017, and Chairman from 2012 to 2017. Mr. Hendrix helped FBR grow into a leading bookrunner for initial common stock offerings for middle market U.S. companies. While at FBR Mr. Hendrix oversaw the growth of the company and oversaw numerous strategic transactions while in his role as Chairman and Chief Executive Officer at FBR, ultimately executing a merger with B. Riley Financial, Inc. (Nasdaq: RILY) in 2017. Following the merger, Mr. Hendrix served as director of B. Riley Financial until October 2017. Mr. Hendrix is a co-founder and Managing Partner of Live Oak Merchant Partners, a merchant bank providing capital and advisory services to middle market companies across several industries. Mr. Hendrix also currently serves as a Senior Advisor to Crestview Partners, a private equity firm, since 2017 and is currently the Chairman of Protect My Car, a portfolio company of Crestview Partners that provides extended auto warranty plans to consumers. Mr. Hendrix currently serves as a director and chair of the audit committee of Navitas Semiconductor, Inc. Mr. Hendrix's affiliation with Crestview Partners began with Crestview's investment in FBR over a decade before. In the last five years, Mr. Hendrix has also been the Founder and Chief Executive Officer of RJH Management Co, a privately held investment management business. Mr. Hendrix received his B.S. in Finance from Miami University. He is well-qualified to serve on our board due to his extensive finance, investment and advisory background.

Gregory Hunt. Mr. Hunt has been a member of the Board since December 2020, and prior to that, a member of Legacy Danimer's board of directors from June 2019 to December 2020. Since May 2012, Mr. Hunt has been the chief financial officer and treasurer of Apollo Management, LP, the investment adviser to Apollo Investment Corp., a management investment company. From April 2010 to May 2012, he served as the Executive Vice President and chief financial officer for Yankee Candle Company. Prior to joining Yankee Candle, from 2007 to 2010, Mr. Hunt served as the Executive Vice President of Strategic and Commercial Development for Norwegian Cruise Lines. Prior to joining Norwegian Cruise Lines, Mr. Hunt served as chief financial officer and chief restructuring officer of Tweeter Home Entertainment Group, Inc. from 2006 to 2007 and the chief financial officer and co-chief executive of Syratech Corporation from 2001 to 2006. Prior to Syratech, he held several senior financial leadership positions including chief financial officer of NRT Inc., Culligan Water Technologies, Inc. and Samsonite Corporation.

Mr. Hunt currently serves as a member of the board of directors of Kymera Corporation and audit committee chairman, a member of the board of directors of GoodWest Industries and co-chairman of the board of advisors for the University of Vermont School of Business. Mr. Hunt is a Certified Public Accountant and holds a Bachelor's degree in Accounting with dual concentration in finance from the University of Vermont. He is well-qualified to serve on the Board and all of its board committees due to his extensive financial, operational and advisory background.

Allison M. Leopold Tilley. Ms. Leopold Tilley has been a member of the Board since August 2022. Ms. Leopold Tilley has more than 34 years of experience advising companies on operations, strategy, governance, risk, and acquisitions. Since October 1988, Ms. Leopold Tilley has been working at Pillsbury Winthrop Shaw Pittman LLP, where she is currently a Managing Board Member and Partner. She has chaired both the Compensation Committee and Nominating Committee of the firm. From February 2016 through June 2017, Ms. Leopold Tilley served on the board of directors of FBR & Co., a then Nasdaq-listed capital markets firm, where she was the chair of the nominating committee and a member of the compensation committee. Ms. Leopold Tilley has also served on several other boards of directors, including the Ronald McDonald House at Stanford from between 2011 and 2017, where she served as the chair of the nominating and corporate governance committee, and Watermark, where she served as a director between 2010 and 2016. Ms. Leopold Tilley received her Bachelor degree in Economics and International Relations from the University of California, Davis and her J.D. from the University of California, Berkeley. She is well-qualified to serve on the Board due to her extensive background in management, operations, governance, and risk analysis.

Dr. Isao Noda. Dr. Noda has been a member of the Board since December 2020, and prior to that, a member of Legacy Danimer's board of directors from 2016 to December 2020. Prior to joining Legacy Danimer, he had a distinguished career extending over three decades at Procter & Gamble and is recognized as one of the world's leading authorities in the field of polymer science, including the field of bioplastics known as PHA. Currently, Dr. Noda is an affiliated teaching professor at the University of Delaware. Dr. Noda holds a Bachelor of Science degree in Chemical Engineering, a Master of Science in Bioengineering, a Master of Philosophy and a Ph.D. in Chemical Engineering from Columbia University. He earned a Doctorate in Science degree in Chemistry from the University of Tokyo. He is well-qualified to serve on the Board due to his education and science background as well as his expertise in the fields of polymer science and bioplastics.

Stuart W. Pratt. Mr. Pratt has been a member of the Board since December 2020, and prior to that, a member of Legacy Danimer's board of directors from May 2015 to December 2020 and its chairman of the board from January 2016 to December 2020. Since 2001, Mr. Pratt has been the president and chief executive officer of the Fort Point Real-Estate Company. He also has served as the chairman of the board of Hunneman, a commercial real estate firm in Boston, Massachusetts since 2016 and previously served as its chief executive officer. In the 1970s, he was the chief executive officer of Federal Street Equities based in Houston, Texas. Mr. Pratt currently serves on the board of overseers of Boston University and is also a trustee emeritus of Boston University where he was chairman of the Real Estate Committee and served on its Audit, Academic Affairs and Finance committees. Additionally, he also serves as a trustee and chairman of the board of the Peabody Essex Museum, a director of Maritime International Inc. based in Bedford, Massachusetts and Avrio AI based in Boston, Massachusetts. Mr. Pratt received his Bachelor of Arts from Boston University. He is well-qualified to serve on the Board and all of its board committees due to his executive leadership, operational and advisory background.

Additional Information

Additional information required by this item will be contained in our definitive proxy statement issued in connection with the 2023 Annual Meeting of Stockholders to be filed with the SEC within 120 days after December 31, 2022 ("2023 Proxy Statement") and is incorporated herein by reference.

Our website address is www.danimerscientific.com. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and any amendments to those reports are available on the investor relations section of our website free of charge. These reports are available on our website soon after we file them with or furnish them to the SEC. These reports should also be available through the SEC's website at www.sec.gov.

We have adopted a written code of conduct that applies to all directors, officers and employees in accordance with Section 406 of the Sarbanes-Oxley Act of 2002 and the rules of the SEC promulgated thereunder. Our Code of Ethics is available in the investor relations section of our website. In the event that we make changes in, or provide waivers from, the provisions of this Code of Ethics for which SEC disclosure is required, we will make such disclosure in the corporate governance section of our website.

We have adopted corporate governance guidelines. The guidelines and the charters of our board committees are available in the investor relations section of our website.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be contained in our 2023 Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Except for the information set forth below and the information set forth in “Part II, Item 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES,” the information required by this item will be contained in our 2023 Proxy Statement and is incorporated herein by reference.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information for all equity compensation plans at December 31, 2022, under which the equity securities of the Company were authorized for issuance:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance
Equity compensation plans approved by stockholders:			
2020 Plan	11,844,644	\$ 14.23	1,689,744
2020 ESPP	85,146	\$ 1.52	2,403,392

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be contained in our 2023 Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be contained in our 2023 Proxy Statement and is incorporated herein by reference.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Index

1. Financial Statements

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Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets at December 31, 2022 and 2021	F-3
Consolidated Statements of Operations for the years ended December 31, 2022 and 2021	F-4
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2022 and 2021	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2022 and 2021	F-6
Notes to Consolidated Financial Statements for the years ended December 31, 2022 and 2021	F-7

2. Financial Statement Schedules

The information required by Schedule II is included in the Notes to Consolidated Financial Statements. All other schedules required by Item 15(b) are not applicable or not required.

(b) Exhibits:

<u>Exhibit No.</u>	<u>Description</u>
2.1+	<u>Agreement and Plan of Merger, dated as of October 3, 2020, by and among Live Oak, Merger Sub, Legacy Danimer, Live Oak Sponsor Partners, LLC, as representative for Live Oak for certain purposes described in the Merger Agreement, and John A. Dowdy, Jr., as representative of the shareholders of Legacy Danimer for certain purposes described in the Merger Agreement (incorporated by reference to Exhibit 2.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on October 5, 2020).</u>
2.2	<u>Amendment No. 1 to Agreement and Plan of Merger, dated as of October 8, 2020, by and among Live Oak, Merger Sub, Legacy Danimer, Live Oak Sponsor Partners, LLC and John A. Dowdy, Jr. (incorporated by reference to Exhibit 2.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on October 9, 2020).</u>
2.3	<u>Amendment No. 2 to Agreement and Plan of Merger, dated as of December 11, 2020, by and among Live Oak, Merger Sub, Legacy Danimer, Live Oak Sponsor Partners, LLC and John A. Dowdy, Jr. (incorporated by reference to Exhibit 2.3 to Current Report on Form 8-K (Commission File No. 001-39280) filed on December 14, 2020).</u>
2.4+	<u>Agreement and Plan of Merger, dated July 28, 2021, by and among the Company, Merger Sub, Novomer and Stockholders' Representative (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on August 3, 2021).</u>
3.1	<u>Fourth Amended and Restated Certificate of Incorporation of the Company (incorporated by reference to Exhibit 3.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 5, 2021).</u>
3.2	<u>Second Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 4.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on February 3, 2022).</u>
4.1	<u>Form of Common Stock Certificate of the Company (incorporated by reference to Exhibit 4.2 to the Registration Statement on Form S-1 (File No. 333-236800) (as amended, the "S-1")).</u>
4.2	<u>Form of Warrant of the Company (incorporated by reference to Exhibit 4.3 to the S-1).</u>
4.3	<u>Warrant Agreement, dated May 5, 2020 by and between the Company and Continental Stock Transfer & Trust Company, as warrant agent (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on May 11, 2020).</u>
4.4	<u>Form of Lock-Up Agreement by and among Live Oak Acquisition Corp. and certain stockholders of Legacy Danimer (incorporated by reference to Exhibit B attached to Exhibit 2.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on October 5, 2020).</u>
4.5	<u>Indenture, dated as of December 21, 2021, between Danimer Scientific, Inc. and U.S. Bank National Association, as trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on December 21, 2021).</u>
4.6	<u>Form of certificate representing the 3.250% Convertible Senior Notes due 2026 (included as Exhibit A to Exhibit 4.1 to the Current Report on Form 8-K (Commission File No. 001-39280) (incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on December 21, 2021).</u>
4.7	<u>Warrant to Purchase Common Stock, dated as of March 17, 2023, issued by Danimer Scientific, Inc. (the "Company") in favor of Jefferies Funding LLC. (included as Exhibit 4.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on March 20, 2023).</u>
10.1	<u>Form of Subscription Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on October 5, 2020).</u>
10.2#	<u>Form of Indemnification Agreement by and between the Company and its directors and officers (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 5, 2021).</u>
10.3#	<u>Danimer Scientific, Inc. 2020 Long-Term Incentive Plan (incorporated by reference to Annex C to the Proxy Statement/Prospectus on Form 424B3 (File No. 333-249691) filed on December 16, 2020 (the "424B3")).</u>
10.4#	<u>Danimer Scientific, Inc. Employee Stock Purchase Plan (incorporated by reference to Annex D to the 424B3).</u>

10.5#	<u>Consulting Agreement, by and between Live Oak Acquisition Corp. and Stuart Pratt, dated October 3, 2020 (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form S-4 (File No. 333-249691) (as amended, the “S-4”)).</u>
10.6#	<u>Amended and Restated Employment Agreement by and between Meredian Holdings Group, Inc. and Michael Smith, dated August 31, 2020 (incorporated by reference to Exhibit 10.7 to the S-4).</u>
10.7#	<u>Amended and Restated Employment Agreement by and between Meredian Holdings Group, Inc. and Scott Tuten, dated August 31, 2020 (incorporated by reference to Exhibit 10.8 to the S-4).</u>
10.8#	<u>Amended and Restated Employment Agreement by and between Meredian Holdings Group, Inc. and Phillip Van Trump, dated August 31, 2020 (incorporated by reference to Exhibit 10.9 to the S-4).</u>
10.9	<u>Non-Competition and Non-Solicitation Agreement, dated October 3, 2020, by and between Live Oak Acquisition Corp. and Michael Smith (incorporated by reference to Exhibit 10.11 to the S-4)</u>
10.10†	<u>Non-Competition and Non-Solicitation Agreement, dated October 3, 2020, by and between Live Oak Acquisition Corp. and Scott Tuten (incorporated by reference to Exhibit 10.12 to the S-4).</u>
10.11†	<u>Non-Competition and Non-Solicitation Agreement, dated October 3, 2020, by and between Live Oak Acquisition Corp. and Phillip Van Trump (incorporated by reference to Exhibit 10.13 to the S-4).</u>
10.12†	<u>Non-Competition and Non-Solicitation Agreement, dated October 3, 2020, by and between Live Oak Acquisition Corp. and Stuart Pratt (incorporated by reference to Exhibit 10.14 to the S-4).</u>
10.13†	<u>Non-Competition and Non-Solicitation Agreement, dated October 3, 2020, by and between Live Oak Acquisition Corp. and Stephen E. Croskrey (incorporated by reference to Exhibit 10.15 to the S-4).</u>
10.14†	<u>Loan Agreement, dated as of April 25, 2019, by and among Carver Development CDE VI, LLC, ST CDE LXII, LLC, and Danimer Scientific Manufacturing, Inc. (incorporated by reference to Exhibit 10.17 to the S-4).</u>
10.15	<u>QLICI Loan and Security Agreement dated as of November 7, 2019, by and between Danimer Scientific Kentucky, Inc. and AMCREF Fund 51, LLC (incorporated by reference to Exhibit 10.18 to the S-4).</u>
10.16	<u>Ratification by Guarantor, dated March 18, 2021, by Meredian Holdings Group, Inc., a Delaware corporation (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K (Commission File No. 001-39280) filed on March 24, 2021).</u>
10.17	<u>Termination Agreement, dated as of January 29, 2021, by and among White Oak Global Advisors, LLC, Danimer Scientific Holdings, LLC, Meredian, Inc., Meredian Bioplastics, Inc., Danimer Scientific, L.L.C., Danimer Bioplastics, Inc., Danimer Scientific Kentucky, Inc., and Meredian Holdings Group, Inc. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on February 4, 2021).</u>
10.18†	<u>Amended and Restated Master Lease Agreement, dated May 2020, between Store Capital Acquisitions, LLC and Meredian Holdings Group, Inc. (incorporated by reference to Exhibit 10.28 to the S-4).</u>
10.19#	<u>Form of Stock Option Agreement under the Danimer Scientific, Inc. 2020 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.29 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 5, 2021).</u>
10.20#	<u>Form of Restricted Stock Agreement under the Danimer Scientific, Inc. 2020 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.30 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 5, 2021).</u>
10.21	<u>Revolving Credit Agreement, made and entered into on April 29, 2021, by and among Danimer Scientific Holdings, Inc., Meredian, Inc., Meredian Bioplastics, Inc., Danimer Scientific, L.L.C., Danimer Bioplastics, Inc. and Danimer Scientific Kentucky, Inc., as borrowers, and Truist Bank, as lender (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on May 5, 2021).</u>
10.22	<u>Guaranty and Security Agreement, dated as of April 29, 2021, made by Danimer Scientific Holdings, Inc., Meredian, Inc., Meredian Bioplastics, Inc., Danimer Scientific, L.L.C., Danimer Bioplastics, Inc., Danimer Scientific Kentucky, Inc., Danimer Scientific, Inc. and Meredian Holdings Group, Inc. in favor of Truist Bank (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on May 5, 2021).</u>
10.23#	<u>Amended and Restated Employment Agreement, dated as of July 23, 2021, between Danimer Scientific, Inc. and Stephen E. Croskrey (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on July 29, 2021).</u>

10.24#	<u>Performance Stock Agreement, dated July 23, 2021, between the Company and Stephen E. Croskrey (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on July 29, 2021).</u>
10.25#	<u>Stock Option Agreement, dated July 23, 2021, between the Company and Stephen E. Croskrey (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K (Commission File No. 001-39280) filed on July 29, 2021).</u>
10.26#	<u>Letter Agreement, dated August 12, 2021, between the Company and Stuart Pratt (incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q (Commission File No. 001-39280) filed on August 16, 2021).</u>
10.27	<u>Amendment No. Four to Loan and Security Agreement and Consent, dated as of December 15, 2021, among Danimer Scientific Holdings, LLC, Meredian Bioplastics, Inc., Meredian, Inc., Danimer Scientific, L.L.C., Danimer Bioplastics, Inc., and Danimer Scientific Kentucky, Inc., the several entities party thereto as lenders, and Southeast Community Development Fund X, L.L.C. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on December 16, 2021).</u>
10.28	<u>Ratification by Guarantor, dated December 15, 2021, by Meredian Holdings Group, Inc. (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on December 16, 2021).</u>
10.29	<u>First Amendment to Revolving Credit Agreement, dated as of December 15, 2021, among Danimer Scientific Holdings, Inc., Meredian, Inc., Meredian Bioplastics, Inc., Danimer Scientific, L.L.C., Danimer Bioplastics, Inc. and Danimer Scientific Kentucky, Inc., Danimer Scientific, Inc., Meredian Holdings Group, Inc. and Truist Bank (incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on December 16, 2021).</u>
10.30	<u>Reaffirmation and Ratification of Guarantor, dated December 15, 2021, by Danimer Scientific, Inc. and Meredian Holdings Group, Inc. (incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K (Commission File No. 001-39280) filed on December 16, 2021).</u>
10.31	<u>Form of Confirmation for Capped Call Transactions.</u>
10.32#	<u>Employment Agreement, dated as of January 16, 2022, between Michael A. Hajost and Danimer Scientific, Inc. (incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 21, 2021).</u>
16.1	<u>Letter from WithumSmith+Brown, PC to the Commission, dated January 5, 2021 (incorporated by reference to Exhibit 16.1 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 5, 2021).</u>
16.2	<u>Letter from Thomas Howell Ferguson P.A. to the Commission, dated January 6, 2021 (incorporated by reference to Exhibit 16.2 to Current Report on Form 8-K (Commission File No. 001-39280) filed on January 6, 2021).</u>
21.1*	<u>Subsidiaries of Danimer Scientific Inc.</u>
23.1*	<u>Consent of KPMG LLP</u>
31.1*	<u>Rule 13a-14(a)/15(d)-14(a) Certification of Chief Executive Officer</u>
31.2*	<u>Rule 13a-14(a)/15(d)-14(a) Certification of Chief Financial Officer</u>
32.1**	<u>Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer</u>
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema
101.CAL*	XBRL Taxonomy Calculation Linkbase
101.LAB*	XBRL Taxonomy Label Linkbase
101.PRE*	XBRL Definition Linkbase Document
101.DEF*	XBRL Definition Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed with this Annual Report.

** Furnished with this Annual Report.

+ The schedules and exhibits to this agreement have been omitted pursuant to Item 601(b)(2) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

Indicates management contract or compensatory plan arrangement.

† Portions of this exhibit have been omitted in accordance with Item 601 of Regulation S-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Danimer Scientific, Inc.

Date: March 28, 2023

By: /s/ Stephen E. Croskrey
Stephen E. Croskrey
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>Person</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Stephen E. Croskrey</u> Stephen E. Croskrey	Chief Executive Officer, Director, and Chairman of the Board (Principal Executive Officer)	March 28, 2023
<u>/s/ Michael A. Hajost</u> Michael A. Hajost	Chief Financial Officer (Principal Financial and Accounting Officer)	March 28, 2023
<u>/s/ John P. Amboian</u> John P. Amboian	Director	March 28, 2023
<u>/s/ Philip Gregory Calhoun</u> Philip Gregory Calhoun	Director	March 28, 2023
<u>/s/ Cynthia Cohen</u> Cynthia Cohen	Director	March 28, 2023
<u>/s/ Richard J. Hendrix</u> Richard J. Hendrix	Director	March 28, 2023
<u>/s/ Gregory Hunt</u> Gregory Hunt	Director	March 28, 2023
<u>/s/ Allison Leopold Tilley</u> Allison Leopold Tilley	Director	March 28, 2023
<u>/s/ Dr. Isao Noda</u> Dr. Isao Noda	Director	March 28, 2023
<u>/s/ Stuart Pratt</u> Stuart Pratt	Director	March 28, 2023

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Danimer Scientific, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Danimer Scientific, Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations, stockholders' equity, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue recognition for research and development services

As discussed in Notes 2 and 14 to the consolidated financial statements, the Company enters into certain contracts with customers to provide research and development services related to developing customized formulations of biodegradable resins based on polyhydroxyalkanoates (PHA). Revenue for such research and development services is recognized over time with progress based on personnel hours incurred to date as a percentage of total estimated personnel hours for each performance obligation identified within the contract.

We identified the evaluation of revenue recognition for research and development services as a critical audit matter. Specifically, evaluating the estimated stage of completion of the services and the estimated future personnel hours required to complete the services involved a high degree of subjective auditor judgment.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design of certain internal controls related to the Company's revenue recognition process for research and development services, including controls related to estimating the stage of completion of the services and the future personnel hours required to complete the services. We evaluated the Company's estimated stage of completion of the services and the estimated future personnel hours required to complete the services for a selection of research and development service contracts by:

- interviewing project personnel to gain an understanding of the status of the project including the stage of completion
- inspecting evidence, such as steering committee materials, status reports or correspondence between the Company and the customer, and comparing them to management's estimated stage of completion for the related research and development services
- confirming terms and conditions of the research and development services contracts directly with the customer to assess management's estimated stage of completion
- comparing historic estimated future personnel hours to actual personnel hours incurred during the current period to assess management's ability to estimate
- comparing the estimated future personnel hours to actual personnel hours incurred subsequent to year-end to assess management's estimate.

/s/ KPMG LLP

We have served as the Company's auditor since 2020.

Atlanta, Georgia
March 28, 2023

DANIMER SCIENTIFIC, INC.
CONSOLIDATED BALANCE SHEETS

<i>(in thousands, except share and per share data)</i>	December 31, 2022	December 31, 2021
Assets:		
Current assets:		
Cash and cash equivalents	\$ 62,792	\$ 286,487
Accounts receivable, net	17,989	17,149
Other receivables, net	1,635	3,836
Inventories, net	32,743	24,573
Prepaid expenses and other current assets	5,225	4,737
Contract assets, net	4,687	3,576
Total current assets	<u>125,071</u>	<u>340,358</u>
Property, plant and equipment, net	453,949	316,181
Intangible assets, net	80,941	84,659
Goodwill	-	62,649
Right-of-use assets	19,028	19,240
Leverage loans receivable	31,446	13,408
Restricted cash	1,609	481
Loan fees	-	1,397
Other assets	226	224
Total assets	<u>\$ 712,270</u>	<u>\$ 838,597</u>
Liabilities and Stockholders' equity:		
Current liabilities:		
Accounts payable	\$ 14,977	\$ 20,790
Accrued liabilities	5,001	18,777
Unearned revenue and contract liabilities	-	214
Current portion of lease liability	3,337	3,337
Current portion of long-term debt, net	1,972	357
Total current liabilities	<u>25,287</u>	<u>43,475</u>
Private warrants liability	212	9,578
Long-term lease liability, net	22,114	22,693
Long-term debt, net	286,398	260,934
Deferred income taxes	200	1,014
Other long-term liabilities	447	638
Total liabilities	<u>\$ 334,658</u>	<u>\$ 338,332</u>
Commitments and Contingencies (Note 19)		
Stockholders' equity:		
Common stock, \$0.0001 par value; 200,000,000 shares authorized: 101,804,454 and 100,687,820 shares issued and outstanding at December 31, 2022 and December 31, 2021, respectively	\$ 10	\$ 10
Additional paid-in capital	676,250	619,145
Accumulated deficit	(298,648)	(118,890)
Total stockholders' equity	<u>377,612</u>	<u>500,265</u>
Total liabilities and stockholders' equity	<u>\$ 712,270</u>	<u>\$ 838,597</u>

The accompanying notes are an integral part of the consolidated financial statements.

DANIMER SCIENTIFIC, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

<i>(in thousands, except share and per share data)</i>	Years Ended December 31,	
	2022	2021
Revenue:		
Products	\$ 48,420	\$ 50,769
Services	4,798	7,980
Total revenue	53,218	58,749
Costs and expenses:		
Cost of revenue	63,632	57,865
Selling, general and administrative	81,589	80,004
Research and development	31,939	20,270
Loss on sale of assets	1	82
Impairment of long-lived assets	63,491	-
Total costs and expenses	240,652	158,221
Loss from operations	(187,434)	(99,472)
Nonoperating income (expense):		
Gain on remeasurement of private warrants	9,366	27,767
Interest, net	(1,723)	(763)
Gain on forgiveness of debt	-	1,776
Loss on loan extinguishment	(1,500)	(2,604)
Other, net	723	(44)
Total nonoperating income (expense):	6,866	26,132
Loss before income taxes	(180,568)	(73,340)
Income taxes	810	13,233
Net loss	\$ (179,758)	\$ (60,107)
Basic and diluted net loss per share	\$ (1.78)	\$ (0.65)
Weighted average number of shares used to compute:		
Basic and diluted net loss per share	101,095,341	93,078,004

The accompanying notes are an integral part of the consolidated financial statements.

DANIMER SCIENTIFIC, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Common stock:		
Balance, beginning of period	\$ 10	\$ 8
Issuance of common stock	-	2
Balance, end of period	10	10
Additional paid-in capital:		
Balance, beginning of period	619,145	414,819
Stock-based compensation expense	56,958	55,270
Stock issued under stock compensation plans	592	3,005
Issuance of common stock, net of issuance costs	(236)	(892)
Shares retained for employee taxes	(154)	(1,728)
Costs related to warrants	(55)	-
Exercise of warrants, net of issuance costs	-	138,196
Fair value of private warrants converted to public warrants	-	45,515
Purchase of capped call options	-	(35,040)
Balance, end of period	676,250	619,145
Accumulated deficit:		
Balance, beginning of period	(118,890)	(58,783)
Net loss	(179,758)	(60,107)
Balance, end of period	(298,648)	(118,890)
Total stockholders' equity	\$ 377,612	\$ 500,265

The accompanying notes are an integral part of the consolidated financial statements.

DANIMER SCIENTIFIC, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Cash flows from operating activities:		
Net loss	\$ (179,758)	\$ (60,107)
Adjustments to reconcile net loss to net cash used in operating activities:		
Impairment of long-lived assets	63,491	-
Stock-based compensation	56,958	55,270
Depreciation and amortization	20,453	11,674
Amortization of debt issuance costs	2,104	480
Bad debt provision	1,904	524
Loss on extinguishment of debt	1,500	1,939
Contract asset reserve	1,216	-
Gain on remeasurement of private warrants	(9,366)	(27,767)
Deferred income taxes	(814)	(13,233)
Amortization of right-of-use assets and lease liability	(367)	(1,040)
Gain on forgiveness of debt	-	(1,776)
Other	163	471
Changes in operating assets and liabilities, net of effects of acquisition:		
Accounts receivable	(3,056)	(11,359)
Other receivables	2,513	-
Inventories, net	(11,170)	(9,799)
Prepaid expenses and other current assets	2,662	(4,336)
Contract assets	(2,328)	(2,110)
Other assets	(4)	(75)
Accounts payable	(1,565)	2,048
Accrued and other long-term liabilities	(6,159)	(1,526)
Unearned revenue and contract liabilities	(214)	(2,241)
Net cash used in operating activities	(61,837)	(62,963)
Cash flows from investing activities:		
Purchases of property, plant and equipment and intangible assets	(164,486)	(185,411)
Investment in leverage loans receivable related to NMTC financing	(18,037)	-
Acquisition of Novomer, net of cash acquired	(14)	(151,179)
Proceeds from sales of property, plant and equipment	55	422
Net cash used in investing activities	(182,482)	(336,168)
Cash flows from financing activities:		
Proceeds from long-term debt	24,700	240,245
Cash paid for debt issuance costs	(1,591)	(10,424)
Principal payments on long-term debt	(1,504)	(27,162)
Proceeds from employee stock purchase plan	377	106
Proceeds from issuance of common stock, net of issuance costs	(236)	(890)
Proceeds from exercise of stock options	215	2,899
Employee taxes related to stock-based compensation	(154)	(1,728)
Cost related to warrants	(55)	-
Proceeds from exercise of warrants, net of issuance costs	-	138,196
Purchase of capped call options	-	(35,040)
Net cash provided by financing activities	21,752	306,202
Net decrease in cash and cash equivalents and restricted cash	(222,567)	(92,929)
Cash and cash equivalents and restricted cash-beginning of period	286,968	379,897
Cash and cash equivalents and restricted cash-end of period	\$ 64,401	\$ 286,968

The accompanying notes are an integral part of the consolidated financial statements.

DANIMER SCIENTIFIC, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1. Basis of Presentation

Description of Business

Danimer Scientific, Inc. (“Company”, “Danimer”, “we”, “us” or “our”) is a performance polymer company specializing in bioplastic replacements for traditional petroleum-based plastics. Our common stock is listed on the New York Stock Exchange under the symbol “DNMR”.

The Company (formerly Live Oak Acquisition Corp. (“Live Oak”)), was originally incorporated in the State of Delaware on May 24, 2019 as a special purpose acquisition company formed for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, recapitalization, reorganization, or similar business combination with one or more businesses. Live Oak completed its initial public offering in May 2020. On December 29, 2020 (“Closing Date”), Live Oak consummated a business combination (“Business Combination”) with Meredian Holdings Group, Inc. (“MHG” or “Legacy Danimer”), with Legacy Danimer surviving the merger as a wholly owned subsidiary of Live Oak. The Business Combination was accounted for as a reverse recapitalization, meaning that Legacy Danimer was treated as the accounting acquirer and Live Oak was treated as the accounting acquiree. Effectively, the Business Combination was treated as the equivalent of Legacy Danimer issuing stock for the net assets of Live Oak, accompanied by a recapitalization. In connection with the Business Combination, Live Oak changed its name to Danimer Scientific, Inc.

On August 11, 2021, we closed the acquisition of Novomer, Inc. (integrated into our business as “Danimer Catalytic Technologies”). Our consolidated results include those of Danimer Catalytic Technologies from the acquisition date forward. Refer to [Note 4](#) for further discussion of the acquisition.

Financial Statements

The accompanying consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and consolidate all assets and liabilities of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated. Certain reclassifications have been made to previously reported amounts to conform to the current presentation. In preparing these consolidated financial statements, we have considered, and where appropriate, included the effects of the COVID-19 pandemic on our operations.

We do not have any material items of other comprehensive income (loss), accordingly, there is no difference between net loss and comprehensive loss for 2022 or 2021, so a separate Statement of Comprehensive Loss that would otherwise be required is not presented.

Note 2. Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Segments

Our chief operating decision maker is the Chief Executive Officer, who reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. We have one primary business activity and there are no segment managers who are held accountable for operating results at a level below the consolidated unit level. Accordingly, we have determined that we have one operating and reportable segment.

Cash and Cash Equivalents and Restricted Cash

We consider all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents include cash or deposits with financial institutions and deposits in highly liquid money market securities. Deposits with financial institutions are insured by the Federal Deposit Insurance Corporation up to \$250,000. Our bank deposits exceed federally-insured limits.

At December 31, 2022 and 2021, long-term restricted cash included \$1.6 million and \$0.4 million, respectively, related to amounts required under New Markets Tax Credit (“NMTC”) debt agreements with various lenders.

Accounts Receivable, net

We record accounts receivable at the stated amount of the transactions with our customers, and we do not charge interest. The allowance for credit losses is our best estimate of the amount of probable credit losses associated with our accounts receivable. We determine the allowance based on historical experience, current conditions, and reasonable and supportable forecasts. Past-due balances are reviewed individually for collectability. We charge off account balances against the allowance after we have exhausted all means of collection and we consider the potential for recovery to be remote. At December 31, 2022 and 2021, the allowances for credit losses were \$2.4 million and \$0.5 million, respectively.

Our accounts receivable generally have net 30 to net 60-day payment terms, and we usually receive consideration in accordance with the payment terms of the contract. Accordingly, we do not provide customers significant financing arrangements.

Inventories, net

Inventories primarily consist of raw materials and finished products and are valued at the lower of cost or net realizable value. We determine cost using the average cost method. We review the net realizable value of inventory on a periodic basis based on historical turnover and assumptions about future product demand and on current selling price. If we determine the expected net realizable value of an inventory item is less than the recorded cost for an inventory item, we record a write-down, charged to cost of revenue, to reduce the value of the inventory to its net realizable value, which establishes a new cost basis for that item.

Property, Plant and Equipment, net

Property, plant and equipment are stated at cost, net of accumulated depreciation and amortization. Property, plant and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, which range from three to forty years. Leasehold improvements are amortized over the shorter of their estimated useful lives or the related lease term. Major property additions, replacements, and improvements that extend useful life are capitalized, while maintenance and repairs which do not extend the useful lives of the assets are expensed. Net gains or losses on equipment sales and other property dispositions are reflected as operating income or expense.

Costs for property, plant and equipment that have not yet been placed in service are accumulated and reported in the caption construction in progress. As such, construction in progress includes expenditures to purchase physical assets from vendors; construction costs; engineering, project management and labor costs; legal and administrative costs; the costs of materials consumed in installation and testing; capitalized interest; and any other incremental costs incurred in order to bring the assets to the condition and location required for them to operate as we intend. After being placed in service, we will transfer each asset to the appropriate caption within property, plant and equipment and commence depreciation.

Impairment of Goodwill and Long-Lived Assets

We test goodwill for impairment annually as of November 1 or more frequently if events or circumstances indicate possible impairment.

Other long-lived assets, such as property, plant and equipment and finite-lived intangible assets, are amortized over their respective estimated useful lives and reviewed for impairment if events or circumstances indicate possible impairment.

We recognized an impairment charge to goodwill of \$62.7 million during 2022.

As of December 31, 2022, we performed a recoverability test for our long-lived assets by comparing their aggregate carrying value to our forecasted undiscounted cash flows over the weighted average useful life of our assets and determined there was no impairment.

Convertible Debt and Capped Call

We elected the early adoption of Accounting Standards Update 2020-06, *Debt - Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (Subtopic 815-40)* ("ASU 2020-06") effective January 1, 2021. This adoption had no impact on our consolidated financial statements prior to the issuance of our convertible debt on December 21, 2021.

We reviewed the applicable models under the simplified guidance and determined that this borrowing should be accounted for as debt and should be presented at stated carrying value, net of issuance costs. Additionally, we determined that since the conversion feature in the Convertible Notes is indexed solely in our own common stock, and since we retain the option to settle the Convertible Notes in shares, the conversion feature qualified for a “scope exception” to treatment as a derivative since the conversion feature qualifies as “fixed for fixed”, meaning the settlement is equal to the difference between a fixed monetary amount of convertible notes and the fair value of a fixed number of our shares. Therefore, we did not separately account for the conversion feature as a derivative.

While the Convertible Notes are subject to redemption at the option of the Noteholder in certain situations, we concluded that the risks associated with the redemption provisions are clearly and closely associated with the risks associated with the Convertible Notes themselves since the Convertible Notes were not issued at a “substantial discount or premium”, and since the redemption provisions include only principal and accrued interest and are not adjusted based on any index other than our common stock.

In conjunction with the convertible debt, we entered into capped call transactions in which we purchased a call option to receive shares of our common stock. The capped call options are legally separate from the convertible debt, and we accounted for the capped call options separately from the convertible debt. The capped call options are indexed solely to our own common stock and classified in stockholders’ equity since we retain the right to receive shares, at our option, if we exercise the capped call options. We recorded the premiums paid for the capped call options, equal to their fair value at inception, as a reduction to additional paid-in capital.

Debt Issuance Costs

Debt issuance costs related to long-term debt are reported as a direct deduction from that debt, except for costs associated with debt instruments with no outstanding borrowings, which are reflected as an asset. Debt issuance costs are amortized using the straight-line method which approximates the effective interest rate method over the term of the related debt. Amortization of debt issuance costs is included in interest expense in the consolidated statements of operations and was \$1.9 million and \$0.5 million, respectively, during 2022 and 2021.

Revenue Recognition

We recognize revenue from product sales and services in accordance with FASB ASC Topic 606, *Revenue from Contracts with Customers* (“ASC 606”). We recognize revenue when our customer obtains control of promised goods or services, in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. At contract inception, we assess the goods or services promised within each contract and determine which are performance obligations and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

We derive our revenues primarily from: 1) product sales of developed compostable resins based on polyhydroxyalkanoates (“PHA”), polylactic acid (“PLA”) and other renewable materials; and 2) research and development (“R&D”) services related to developing customized formulations of biodegradable resins based on PHA.

We generally produce and sell finished products, for which we recognize revenue upon shipment, which is typically when control of the underlying product is transferred to the customer and all other revenue recognition criteria have been met. We offer a standard quality assurance warranty related to the fitness of our finished goods. There are no forms of variable consideration such as discounts, rebates, or volume discounts that we estimate to reduce our transaction price.

R&D service revenues generally involve milestone-based contracts under which we work with a customer to develop a PHA-based solution designed to the customer’s specifications, which may involve a single or multiple performance obligations. When an R&D contract has multiple performance obligations, we allocate the transaction price to the performance obligations utilizing a cost-plus approach to estimate the stand-alone selling price, which contemplates the level of effort to satisfy the performance obligations, and then allocate the transaction price to each of the performance obligations based on the relative percentage of the stand-alone selling price. We recognize revenue for these R&D services over time with progress based on personnel hours incurred to date as a percentage of total estimated personnel hours for each performance obligation identified within the contract. Upon completion of the R&D services, the customers have an option to enter into long-term supply agreements with us for the product(s) that were developed within the respective contracts. We concluded these customer options were marketing offers, not separate performance obligations, since the options did not provide a material right to any of our customers.

For our R&D service revenues, we estimate the number of personnel hours to be incurred for each contract based on our expertise and experience in providing these services. These estimates may ultimately differ from the actual hours incurred. An increase of 10% in the estimated hours remaining to complete each of our R&D contracts at December 31, 2022 would have reduced our revenue by \$0.4 million.

We incur certain fulfillment costs that meet the criteria for capitalization in accordance with ASC 340. These costs are amortized to cost of revenue on a per pound basis as products are sold.

We recognize a contract liability if we receive consideration (or have the conditional right to receive consideration) in advance of performance, which only occurs with our R&D services contracts. R&D service customers generally pay us at the commencement of each project and as milestones are achieved, as outlined in the individual contracts.

Cost of Revenue

Direct costs of production (including raw materials, inbound freight, production and warehouse labor and stock-based compensation, plant utilities, plant rent, depreciation, and other production-related expenditures) and delivery are charged to cost of revenue when the related revenue is recognized. Direct costs related to R&D service revenue are also charged to cost of revenue.

Stock-Based Compensation

Awards to employees have been granted with vesting requirements based on duration of service only, a combination of market-based and service-based conditions, and a combination of performance-based and service-based conditions. We recognize expense associated with service-based only condition awards on a straight-line basis over the requisite service period. We recognize expense associated with awards with market-based or performance-based vesting conditions on a straight-line basis over the longest of the explicit, implicit or derived service period term of each award, as applicable.

Advertising Costs

We charge advertising costs to selling, general and administrative expense as incurred. Advertising costs were not material during 2022 or 2021.

Research and Development Costs

We charge research and development costs to expense as incurred. Research and development costs include salaries, depreciation, amortization, stock-based compensation, consulting and other external fees, and facility costs directly attributable to research and development activities.

Income Taxes

We are taxed as a corporation and as such, use the asset and liability method of accounting for income taxes. We file consolidated income tax returns that include our subsidiary legal entities.

Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits such as net operating loss carryforwards to the extent that realization of such benefits is more likely than not.

Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date.

In the ordinary course of business, there may be transactions for which the ultimate tax outcome is uncertain. We assess uncertain tax positions in each of the tax jurisdictions in which we operate and account for the related financial statement implications. Unrecognized tax benefits are reported using the two-step approach, under which tax effects of a position are recognized only if it is more likely than not to be sustained and the amount of the tax benefit recognized is equal to the largest tax benefit that is greater than fifty percent likely of being realized upon ultimate settlement of the tax position.

Determining the appropriate level of unrecognized tax benefits requires us to exercise judgment regarding the uncertain application of tax law. We would adjust the amount of unrecognized tax benefits when information became available or when an event occurred indicating a change would be appropriate. We would include interest and penalties related to any uncertain tax positions as part of income tax expense.

Business Combinations

We recognize assets acquired and liabilities assumed in business combinations at their estimated acquisition date fair values, with the excess of purchase price over the estimated fair values of identifiable net assets recorded as goodwill. Assigning fair values requires us to make significant estimates and assumptions regarding the fair value of identifiable intangible assets. We may refine these estimates, if necessary, over a period not to exceed one year by taking into consideration new information that, if known at the acquisition date, would have affected the fair values recognized for assets acquired and liabilities assumed.

Significant estimates and assumptions are used in estimating the value of acquired identifiable intangible assets, possibly including estimating future cash flows based on forecasted revenues and EBITDA margins that we expect to generate following the acquisition, selecting an appropriate royalty rate when applicable, applying an appropriate discount rate to estimate a present value of those cash flows and determining acquired assets' useful lives. These assumptions are forward-looking and their realization will be affected by future economic and market conditions.

Leases

Operating leases are reflected as right-of-use assets and lease liabilities. The right-of-use assets and lease liabilities are recognized as the present value of the future lease payments over the lease term at commencement date, adjusted for lease incentives, prepaid or accrued rent, and unamortized initial direct costs, as applicable. Since most of our leases do not provide a readily determinable rate implicit in the lease, we use our incremental borrowing rate based on the information available at each commencement date in determining the present value of future payments. Our incremental borrowing rate for a lease is the rate of interest we would have to pay on a collateralized basis to borrow an amount equal to the lease payments under similar terms. Our lease terms may include options to extend or terminate the lease, typically at our discretion. We evaluate the renewal options at commencement and as circumstances dictate, and if they are reasonably certain of exercise, we include the renewal period in the lease term.

For all classes of leased assets, we have applied an accounting policy election to exclude short-term leases from recognition in our consolidated balance sheets. A short-term lease has a lease term of 12 months or less at the commencement date and does not include a purchase option that is reasonably certain of exercise. We recognize short-term lease expense in our consolidated statements of operations on a straight-line basis over the lease term.

Lease costs are recorded in cost of revenue, research and development expenses, or selling, general and administrative expenses based on the underlying functions of the leased assets.

Earnings per Share

We compute basic earnings per share by dividing net income (loss) by the weighted-average number of common shares outstanding during the period.

We compute diluted earnings per share by dividing net income (loss) by the weighted-average number of common shares outstanding during the period, including potentially dilutive ordinary shares from option exercises, employee share awards, and other dilutive instruments that have been issued. For periods where we present a net loss, such securities are excluded from the computation of diluted net loss per share as they would be anti-dilutive.

Recently Adopted Accounting Pronouncements

Debt - Debt with Conversion and Other Options and Derivatives and Hedging Contracts in Entity's Own Equity - In August 2020, the FASB issued ASU 2020-06, to simplify the accounting for convertible instruments by eliminating large sections of the existing guidance in this area, which we adopted effective January 1, 2021. It also eliminates several triggers for derivative accounting, including a requirement to settle certain contracts by delivering registered shares. This had no effect on our consolidated financial statements prior to the issuance of the convertible notes (see [Note 12](#)).

Recently Issued Accounting Pronouncements

There have been no new accounting pronouncements not yet effective that we believe will have a significant effect, or potential significant effect, on our consolidated financial statements.

Note 3. Fair Value Considerations

GAAP defines “fair value” as the price we would receive to sell an asset in a timely transaction or pay to transfer a liability in a timely transaction with an independent buyer. GAAP also sets forth a framework for measuring fair value utilizing a three-tier hierarchy based on the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs.

The three levels of the fair value hierarchy are as follows:

Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical assets and liabilities;

Level 2 - Observable inputs other than quoted prices in active markets, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data;

Level 3 - Unobservable inputs reflecting management’s assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

Level 1

The carrying amounts of our cash and cash equivalents and restricted cash were measured using quoted market prices in active markets and represent Level 1 investments. Our other financial instruments such as accounts receivable, accounts payable and accrued expenses, approximate their fair values due to their short maturities. The fair value of our 3.250% Convertible Senior Notes due 2026 (“Convertible Notes”), based on trades made around December 31, 2022 was approximately \$90 million.

We value our restricted stock and restricted stock units that do not include market or performance factors at the closing price of a share of our common stock on the grant date.

We value our restricted stock units with performance factors at the closing price of a share of our common stock on the grant date or on each period end date, or \$1.79 at December 31, 2022, for those such grants that include a cash settlement feature.

Level 2

We value our restricted stock awards that contain a market-based vesting provision using a Monte Carlo simulation, which takes into account a large number of potential stock price scenarios over time and incorporates varied assumptions about volatility and exercise behavior for those various scenarios. These assumptions are based on market data but cannot be directly observed. A fair value is determined for each potential outcome. The grant date fair value of this restricted stock is the average of the fair values calculated for each potential outcome, or \$36.57 for such restricted stock granted in 2021. There were no restricted share awards that contained a market-based provision issued in 2022.

The following table provides information regarding the restricted shares that were valued using Monte Carlo simulations on the March 10, 2021 grant date.

Fair value at grant date	\$	36.57
Dividend yield		0.00%
Risk-free rate		1.51%
Expected term (in years)		9.80

Level 3

We use the Black-Scholes option pricing model to value stock options, including ESPP awards, and our outstanding warrants to purchase shares of our common stock at an exercise price of \$11.50 per share, subject to adjustments, that had been privately placed prior to the Business Combination (“Private Warrants”). The Private Warrants and stock options with a cash-settlement feature are re-valued each period end, and all other stock options are valued on the date of grant only. Other than this mark to market factor, we recognize this expense on a straight-line basis over the respective vesting periods. Since our stock price history as a publicly traded company is shorter in duration than the expected lives of our options (other than ESPP awards), we use a peer group to assess volatility. We have not paid and do not currently anticipate paying a cash dividend on our common stock, so we have set the expected annual dividend yield to zero for all calculations. We used risk-free rates equal to the U.S. Treasury yield curves in effect as

of the valuation dates for durations equal to the expected lives of each option. We use the simplified method under SAB Topic 14 to determine the expected lives of stock options, defined as the mid-point between the vesting period and the contractual term for each grant. We use the remaining contractual life of the warrants as their expected life.

The following table sets forth the ranges of inputs used in our Black Scholes calculations for stock options, other than ESPP awards, and the fair values determined.

	December 31,	Years Ended December 31,	
	2022	2022	2021
Share prices of our common stock	\$1.79	\$1.79 - \$5.86	\$8.52 - \$45.41
Expected volatilities	50.74%	44.42% - 51.30%	41.45% - 48.60%
Risk-free rates of return	3.94%	1.66% - 3.96%	0.88% - 1.30%
Expected option terms (years)	4.78	4.56 - 6.00	5.58 - 6.00
Calculated option values	\$0.18	\$0.03 - \$2.68	\$1.67 - \$18.52

The table below sets forth the range of inputs we used in our Black Scholes models for Private Warrant valuations and the fair values determined.

	December 31,	Years Ended December 31,	
	2022	2022	2021
Share price of our common stock	\$ 1.79	\$1.79 - \$5.86	\$ 8.52
Expected volatility	55.83%	49.43% - 55.83%	47.62%
Risk-free rate of return	4.13%	2.41% - 4.14%	1.11%
Expected warrant term (years)	3.00	3.00 - 3.75	3.99
Fair value determined per warrant	\$ 0.05	\$0.05 - \$1.17	\$ 2.45

Note 4. Business Combinations

Live Oak and Legacy Danimer

Under the reverse recapitalization method of accounting used for the Business Combination, no goodwill or other intangible assets were recorded.

Earnout Shares

The Legacy Danimer shareholders are entitled to receive up to an additional 6,000,000 shares of our common stock (“Earnout Shares”) if the volume-weighted average price (“VWAP”) of our shares equals or exceeds the following prices for any 20 trading days within any 30 trading-day period between June 29, 2021 and the following dates:

Final Trading Period End Date	Number of Shares	VWAP Target
December 31, 2023	2,500,000	\$ 15.00
December 31, 2025	2,500,000	\$ 20.00
December 31, 2025	1,000,000	\$ 25.00

The Earnout Shares are included in our equity.

On September 15, 2021, the first VWAP target was achieved and we issued 2,499,993 Earnout Shares.

Danimer Catalytic Technologies

On August 11, 2021, we acquired all of the outstanding shares of Novomer, Inc., a privately held company, in exchange for \$153.9 million in cash, gross of cash acquired, subject to certain customary adjustments as set forth in the merger agreement. We also entered into employment or consulting agreements with, and granted stock options to, certain key employees and consultants of Novomer, Inc. We have also recorded contingent purchase price payable that will be payable to the sellers upon our collection of an income tax refund receivable. We have integrated Novomer, Inc. into our business as Danimer Catalytic Technologies.

Danimer Catalytic Technologies uses its proprietary thermal catalytic conversion process to produce a unique type of PHA, referred to under its brand name as Rinnovo, that can be incorporated into some of our products as a complement to our existing PHA polymer at reduced cost.

The table below sets forth the final fair values of assets acquired and liabilities assumed including the adjustments recorded in 2022 and 2021.

<i>(in thousands)</i>	September 30,		December 31,		August 11,	
	2021	Adjustments	2021	Adjustments	2022	
Cash and restricted cash	\$ 2,741	\$ -	\$ 2,741	\$ -	\$ 2,741	
Property, plant and equipment	15,591	3,031	18,622	-	18,622	
Other assets acquired	2,285	17	2,302	-	2,302	
Right-of-use asset	2,000	715	2,715	-	2,715	
Acquired technology	85,400	(1,000)	84,400	-	84,400	
Goodwill	66,581	(3,932)	62,649	14	62,663	
Deferred tax liability	(16,159)	1,913	(14,246)	-	(14,246)	
Lease liability	(2,000)	(759)	(2,759)	-	(2,759)	
Liabilities assumed	(2,019)	15	(2,004)	(14)	(2,018)	
Contingent purchase price payable	(500)	-	(500)	-	(500)	
Total preliminary purchase price	\$ 153,920	\$ -	\$ 153,920	\$ -	\$ 153,920	

We originally recognized the assets acquired and liabilities assumed at their estimated acquisition date fair values, with the excess of the purchase price over the estimated fair values of the identifiable net assets acquired recorded as goodwill.

The acquired goodwill was attributable to the strategic opportunities and synergies that we expected to arise from the acquisition and the value of its existing workforce. The goodwill was not deductible for federal income tax purposes. As of December 31, 2022, we have fully impaired the acquired goodwill balance. Refer to [Note 7](#) for additional information.

The following table compares pro forma revenue and loss from operations for the year ended December 31, 2021 as if the acquisition had taken place on January 1, 2021 to the actual results from the year ended December 31, 2022. These pro forma results do not necessarily reflect what the combined entity's results would have been had the acquisition taken place at that time, and this pro forma financial information may not be useful in predicting our future financial results. The actual results might have differed significantly from the pro forma amounts reflected herein due to a variety of factors. The following includes pro forma adjustments to reflect amortization of acquired technology intangible assets. We do not disclose pro forma impact related to income taxes or earnings-per-share as we do not believe those are useful to the reader in our situation.

<i>(in thousands)(unaudited)</i>	Years Ended December 31,	
	2022	2021
Revenue	\$ 53,218	\$ 58,783
Loss from operations	(187,434)	(101,986)

During 2022 and 2021, Danimer Catalytic Technologies incurred \$11.1 million and \$4.4 million in expenses, respectively, including amortization expense.

Note 5. Inventories, net

Inventories, net consisted of the following:

<i>(in thousands)</i>	December 31, 2022	December 31, 2021
Raw materials	\$ 19,964	\$ 11,555
Work in process	1,524	928
Finished goods and related items	11,255	12,090
Total inventories, net	\$ 32,743	\$ 24,573

At December 31, 2022 and 2021, finished goods and related items included \$4.9 million and \$5.6 million, respectively, of finished neat PHA.

Note 6. Property, Plant and Equipment, net

Property, plant and equipment, net, consisted of the following:

<i>(in thousands)</i>	<u>Estimated Useful Life (Years)</u>	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Land and improvements	20	\$ 92	\$ 92
Leasehold improvements	Shorter of useful life or lease term	109,805	27,845
Buildings	15-40	2,156	2,156
Machinery and equipment	5-20	180,846	97,923
Motor vehicles	7-10	921	912
Furniture and fixtures	7-10	473	420
Office equipment	3-10	5,976	3,368
Construction in progress	N/A	198,545	212,647
		<u>498,814</u>	<u>345,363</u>
Accumulated depreciation and amortization		(44,865)	(29,182)
Property, plant and equipment, net		<u>\$ 453,949</u>	<u>\$ 316,181</u>

We reported depreciation and amortization expense (which included amortization of intangible assets) as follows:

<i>(in thousands)</i>	<u>Years Ended December 31,</u>	
	<u>2022</u>	<u>2021</u>
Cost of revenue	\$ 12,249	\$ 8,041
Selling, general and administrative	2,407	597
Research and development	5,797	3,036
Total depreciation and amortization expense	<u>\$ 20,453</u>	<u>\$ 11,674</u>

Construction in progress consists primarily of the early phases of construction of our new greenfield facility in Bainbridge, Georgia, construction of a Rinnovo pilot plant in Rochester, New York and the remainder of our Phase II expansion of our facility in Winchester, Kentucky as noted in the table below.

<i>(in thousands)</i>	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Georgia	\$ 191,576	\$ 83,660
New York	4,959	698
Kentucky	2,010	128,289
	<u>\$ 198,545</u>	<u>\$ 212,647</u>

We expect to place most of the remaining assets in Kentucky in service during 2023. We do not have expected in-service dates for our Greenfield Facility in Bainbridge, Georgia, since we have paused major construction, or for our Rinnovo pilot plant in Rochester, New York, since that project is still in an early stage of construction. We will need to obtain additional financing to complete our Greenfield Facility, which has an engineering cost estimate range from \$515 million to \$665 million, and if we do not obtain financing, our investment could be impaired.

Property, plant and equipment at December 31, 2022 and 2021 included gross capitalized interest of \$14.6 million and \$5.7 million, respectively. In 2022 and 2021, we capitalized interest costs of \$8.9 million and \$0.6 million, respectively, to property, plant and equipment.

Note 7. Intangible Assets and Goodwill

Intangible Assets

Our recognized intangible assets consist primarily of patents and the unpatented technological know-how of Danimer Catalytic Technologies. The values of Danimer Catalytic Technologies' patents and unpatented know-how are inseparable and represent their acquisition-date fair value, less subsequent amortization. We also have recognized other patents, which were initially recorded at cost.

We capitalize patent acquisition costs and legal fees related to the defense of patents when we believe a successful defense of that patent is probable and that a successful defense increases the value of the patent. Patent costs are amortized on a straight-line basis over their estimated useful lives, which range from 13 to 20 years. Our intangible portfolio has an estimated weighted average useful life of 18.5 years.

Intangible assets, net, consisted of the following:

<i>(in thousands)</i>	December 31, 2022	December 31, 2021
Intangible assets, gross	\$ 94,291	\$ 93,244
Capitalized patent costs not yet subject to amortization	1,604	869
Intangible assets subject to amortization, gross	92,687	92,375
Accumulated amortization	(13,350)	(8,585)
Intangible assets subject to amortization, net	79,337	83,790
Total intangible assets, net	<u>\$ 80,941</u>	<u>\$ 84,659</u>

Amortization expense was \$4.8 million and \$2.1 million, respectively during 2022 and 2021 and are included primarily in research and development costs.

We expect intangible assets currently subject to amortization will amortize over the coming years as follows:

<i>(in thousands)</i>	Amortization Expense
Years Ending December 31:	
2023	\$ 4,593
2024	4,258
2025	4,258
2026	4,258
2027	4,258
Thereafter	57,712
Total	<u>\$ 79,337</u>

Goodwill

Goodwill is tested for impairment on an annual basis each November 1 and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. We considered the continuation of a sustained decline in our market capitalization level below our book equity value and other macroeconomic factors as indicators that an impairment loss may have occurred. Therefore, we performed an interim quantitative impairment assessment utilizing a market capitalization analysis as a corroboration of the fair value of our single reporting unit while assuming a control premium of 10%. As a result of the test, we determined that an impairment existed and recorded an impairment charge of \$62.7 million during the year ended December 31, 2022.

Changes in the carrying amount of goodwill were as follows:

<i>(in thousands)</i>	
Balance at December 31, 2020	\$ -
Acquisition of Novomer, Inc.	62,649
Balance at December 31, 2021	62,649
Adjustment of estimate of fair value of liabilities assumed related to Danimer Catalytic Technologies acquisition	14
Accumulated impairment losses	(62,663)
Balance at December 31, 2022	<u>\$ -</u>

Note 8. Leases

We currently lease all of our property in Winchester, Kentucky and some of our properties in Bainbridge, Georgia from a large, diversified commercial property REIT under an operating lease. This lease was amended in 2021, which increased the annual base rent to \$3.1 million. The rent is subject to an annual adjustment of the lesser of (i) 2.0% or (ii) 1.25 times the change in the Consumer Price Index on each January 1, including during any extension terms. As

of December 31, 2022, the amended lease had a remaining term of 16 years, with renewal terms up to an additional 20 years at our option, which we are currently not including in our measurement of our lease obligations. We used an estimated incremental borrowing rate of 11.5% as of the date of the amendment to calculate the lease liability and did not assume any rent increases in that calculation.

In August 2021, as part of the Danimer Catalytic Technologies business combination, we acquired their operating leasehold interest for their principal operating facility in Rochester, New York. We evaluated the present value of the lease payments using our estimated incremental borrowing rate of 11.5% and recorded a right-of-use asset and a lease liability of \$2.7 million. Refer to [Note 4](#) for additional information on the acquisition. As of December 31, 2022, the lease had a remaining term of approximately five years with an option for a five-year renewal term, which we assumed will be exercised for lease accounting purposes.

As of December 31, 2022 and 2021, our weighted average remaining lease terms were 15.5 years and 16.5 years, respectively.

The following table sets forth the allocation of our operating lease costs.

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Cost of revenue	\$ 2,506	\$ 1,917
Selling, general and administrative	469	303
Research and development	536	268
Total operating lease cost	<u>\$ 3,511</u>	<u>\$ 2,488</u>

The following table reconciles the undiscounted future lease payments for operating leases to the operating lease liabilities at December 31, 2022.

<i>(in thousands)</i>		
Undiscounted future operating lease cash flows for the periods ending December 31,		
2023	\$	3,545
2024		3,548
2025		3,550
2026		3,553
2027		3,556
Thereafter		<u>36,847</u>
		54,599
Less interest		<u>(29,148)</u>
Present value of lease liability	\$	<u>25,451</u>

Note 9. New Market Tax Credit Transactions

We have entered into financing arrangements under the New Markets Tax Credit (“NMTC”) program with various unrelated third-party financial institutions (“Investors”) during 2019 and 2022. The NMTC program was provided for in the Community Renewal Tax Relief Act of 2000 (“Act”) to induce capital investment in qualified lower income communities. The Act permits taxpayers to claim credits against their federal income taxes for up to 39% of qualified investment in the equity of the community development entities (“CDEs”). CDEs are privately managed investment institutions that are certified to make qualified low-income community investments.

These financing arrangements were structured with the Investors, their wholly owned investment funds (“Investment Funds”) and their wholly owned CDEs in connection with our participation in qualified transactions under the NMTC program. In each of the financing arrangements, we loaned money (in the form of leverage loans) to the Investment Funds and the Investors invested in the Investment Funds. Each Investment Fund then contributed the funds from our loan and the Investor’s investment to a CDE. Each CDE then loaned the contributed funds to a wholly owned subsidiary of the Company.

The Investors are entitled to substantially all of the benefits derived from the tax credits. The NMTC tax credits are subject to recapture for a compliance period of seven years. During the compliance period, we are required to comply with various regulations and contractual provisions that apply to the NMTC arrangements. We have agreed to indemnify the Investors for any losses or recaptures of the NMTCs until such time as our obligations to deliver tax

benefits are relieved. We do not expect the maximum potential amount of future payments under this indemnification to exceed the face amount of the related debt, net of leverage loans receivable, totaling \$14.3 million and \$7.6 million at December 31, 2022 and 2021, respectively. We believe that the likelihood of a required payment under this indemnification is remote. We do not anticipate any credit recaptures will be required in connection with the financing arrangements, and there have been no credit recaptures as of December 31, 2022. The arrangements also include a put/call feature which becomes enforceable at the end of the compliance periods whereby we may be obligated or entitled to repurchase the Investor's interests in each of the Investment Funds for a nominal amount or fair value. We believe the Investors will exercise their put options at the end of the compliance periods for each of the transactions for nominal amounts. The value attributed to the puts/calls is nominal.

We have determined that each NMTC program contains a variable interest entity ("VIE"). The ongoing activities of the Investment Funds consist of collecting and remitting interest and fees and maintaining continued compliance with the NMTC program. The responsibility for performing these ongoing activities resides with the Investors. The Investors were also integral during the initial designs of the Investment Funds and created the structures that allow the Investors to monetize the tax credits available through the NMTC programs.

Based on these circumstances, we concluded that we were not the primary beneficiary of each VIE and therefore we do not consolidate the VIEs. We record the loans we provided to the Investment Funds as leveraged loan receivables. We include the loans we received from the CDEs within long-term debt.

The below table summarizes our NMTC arrangements (*dollars in thousands*):

Transaction Date	Amount Borrowed	Interest Rate	Recapture Period End	Loan Maturity Date
4/25/2019	9,000	1.96%	4/30/2026	9/30/2048
11/7/2019	12,000	1.06%	11/30/2026	11/7/2039
8/23/2022	24,700	1.00%	11/1/2029	8/23/2052

Certain funds related to these NMTC arrangement are restricted for specific use during the compliance periods and these funds are reflected as restricted cash.

As part of our NMTC transactions, we have made leverage loans as follows (*dollars in thousands*):

Transaction Date	Amount Loaned	Interest Rate	Interest Rate Period End	Loan Maturity Date
4/25/2019	6,262	2.00%	4/25/2026	9/30/2048
11/7/2019	7,146	1.08%	11/7/2026	11/7/2039
8/23/2022	18,038	1.00%	11/10/2029	8/23/2052

If NMTC compliance requirements are met through the end of each respective recapture period, we expect each debt instrument and the related leverage loan will be forgiven, resulting in our recognition of gains approximately equal to each net amount. We expect these loans will be forgiven before any principal is due.

Note 10. Accrued Liabilities

The components of accrued liabilities were as follows:

<i>(in thousands)</i>	December 31, 2022	December 31, 2021
Compensation and related expenses	\$ 1,305	\$ 4,572
Construction in progress accruals	1,089	8,896
Accrued taxes	669	500
Accrued interest	134	274
Transaction costs and other legal and consulting fees	443	850
Accrued utilities	415	320
Purchase accrual	401	-
Accrued loss on supply contract	-	1,423
Legal settlement	-	1,250
Other	545	692
Total accrued liabilities	<u>\$ 5,001</u>	<u>\$ 18,777</u>

Note 11. Private Warrants

At December 31, 2022 and 2021, there were 3,914,525 outstanding Private Warrants to purchase shares of our common stock at an exercise price, subject to adjustments, of \$11.50 per share that were privately placed prior to the Business Combination. On December 28, 2025, any then-outstanding Private Warrants will expire.

The Private Warrants meet the definition of a derivative instrument and are reported as liabilities at their fair values each period end, with changes in the fair value of the Private Warrants recorded as a non-cash charge or gain. A roll-forward of the private warrants liability is below.

(in thousands)

Balance at December 31, 2020	\$	(82,860)
Gain on remeasurement of private warrants		27,767
Fair value of Private Warrants sold		45,515
Balance at December 31, 2021		(9,578)
Gain on remeasurement of private warrants		9,366
Balance at December 31, 2022	\$	<u>(212)</u>

Note 12. Debt

The components of long-term debt were as follows:

(in thousands)	December 31, 2022	December 31, 2021
3.25% Convertible Senior Notes	\$ 240,000	\$ 240,000
New Market Tax Credit Transactions	45,700	21,000
Subordinated Term Loan	10,205	10,205
Commercial Premium Finance Notes	1,828	-
Vehicle and Equipment Notes	366	407
Mortgage Notes	218	242
Asset-based Lending Arrangement	-	-
Total	\$ 298,317	\$ 271,854
Less: Total unamortized debt issuance costs	(9,947)	(10,563)
Less: Current maturities of long-term debt	(1,972)	(357)
Total long-term debt	<u>\$ 286,398</u>	<u>\$ 260,934</u>

3.25% Convertible Senior Notes

On December 21, 2021, we issued \$240 million principal amount of our Convertible Notes subject to an indenture (“Indenture”).

The Convertible Notes are our senior, unsecured obligations and are (i) equal in right of payment with our existing and future senior, unsecured indebtedness; (ii) senior in right of payment to our existing and future indebtedness that is expressly subordinated to the Convertible Notes; (iii) effectively subordinated to our existing and future secured indebtedness, to the extent of the value of the collateral securing that indebtedness; and (iv) structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables.

The Convertible Notes accrue interest at a rate of 3.250%, payable semi-annually in arrears on June 15 and December 15 of each year, beginning on June 15, 2022. The Convertible Notes will mature on December 15, 2026. Before June 15, 2026, noteholders will have the right to convert their Convertible Notes only upon the occurrence of certain events. Starting on June 15, 2026, noteholders may convert their Convertible Notes at any time at their election until the close of business on the second scheduled trading day immediately before the maturity date. We will settle conversions by paying or delivering, as applicable, cash, shares of common stock or a combination of cash and shares, at our election. The initial conversion rate is 92.7085 shares of common stock per \$1,000 principal amount of Convertible Notes, or approximately \$10.79 per share of common stock. The conversion rate and conversion price will be subject to customary adjustments upon the occurrence of certain events. In addition, if certain corporate events that constitute a “Make-Whole Fundamental Change” (as defined in the Indenture) occur, then the conversion rate will, in certain circumstances, be increased for a specified period of time.

The Convertible Notes will be redeemable, in whole or in part (subject to certain limitations described below), at our option at any time, and from time to time, between December 19, 2024, and October 20, 2026, but only if certain liquidity conditions are satisfied and the last reported sale price per share of our common stock exceeds 130% of the conversion price on (i) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related redemption notice; and (ii) the trading day immediately before the date we send such notice. However, we may not redeem less than all of the outstanding notes unless at least \$100.0 million aggregate principal amount of notes are outstanding and not called for redemption as of the time we send the related redemption notice. The redemption price will be a cash amount equal to the principal amount of the Convertible Notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date. In addition, calling any Convertible Note for redemption will constitute a Make-Whole Fundamental Change with respect to that Convertible Note, in which case the conversion rate applicable to the conversion of that Convertible Note will be increased in certain circumstances.

Capped Calls

Also in December 2021, in connection with the Convertible Notes, we purchased capped calls (“Capped Calls”) with certain well-capitalized financial institutions for \$35 million. The Capped Calls were structured to partially offset the increase in the outstanding number of our common shares should we settle the Convertible Notes in shares, or to reduce the net cash outlay required should we settle the Convertible Notes in cash. The Capped Calls are call options that permit us, at our option, to require the counterparties to deliver to us shares of our common stock.

The number of shares to be delivered upon such exercise depends on the market value of our common stock at the time of exercise, subject to a cap initially equal to \$16.92, and an initial strike price of \$10.79 per share. The cap and strike price are subject to adjustment in response to specified changes in our capitalization such as stock splits. Considering these unadjusted figures and assuming a cash settlement of the principal amount of the Convertible Notes upon a conversion, if we settle the incremental value of the Convertible Notes upon conversion with shares when the market price (as measured according to the terms of the Capped Call) of our common stock is between \$10.79 and \$16.92, we will be able to call shares equal to the number of incremental shares issuable under the Notes. If such stock price is less than that, then the Capped Calls are “out of the money” and we would not exercise them. To the extent such stock price is greater than \$16.92, the Capped Calls would not supply enough shares to entirely offset the number of incremental shares to be issued. We may net-settle the Capped Calls and receive cash instead of shares. We have not exercised any of the Capped Calls at December 31, 2022, and the Capped Calls expire on April 12, 2027.

New Markets Tax Credit Transactions

We have entered into financing arrangements under the NMTC program as described in [Note 9](#).

Subordinated Term Loan

In March 2019, we, through a subsidiary, entered into a subordinated second credit agreement (“Subordinated Term Loan”) for \$10 million in term loans. The term loans mature on February 13, 2024 and require monthly interest only payments, with the outstanding principal balance due at maturity. The base interest rate was the “Prime Rate” as quoted by the Wall Street Journal plus 2.75%. We have the option to pay up to two percent (2%) in any interest payable in any fiscal quarter by adding such interest payment to the principal balance of the related note, but did not exercise this option in 2022 or 2021. The Subordinated Term Loan provided for financial covenants including a maximum capital expenditures limit, leverage ratio, fixed charge coverage ratio and adjusted EBITDA covenants, certain of which became more restrictive over time.

On March 18, 2021, we amended the Subordinated Term Loan to, among other things, change the base rate from the prime rate to LIBOR, lower the applicable margin to 2% from 2.75%, remove certain prepayment requirements, convert the financial covenants to “springing” financial covenants that do not apply as long as the borrowing subsidiary has at least \$10 million of unrestricted cash on deposit, increase the capital expenditure covenant, and restrict our ability to prepay the loan until after July 1, 2022. The applicable LIBOR rate at December 31, 2022 was 4.2%.

On December 15, 2021, we amended the Subordinated Term Loan to, among other things, remove the restriction on our ability to voluntarily prepay up to \$4.5 million prior to July 1, 2022, and reduce the requirement to maintain at least \$10 million of unrestricted cash mentioned above to \$5 million in the event we prepay \$4.5 million.

The Subordinated Term Loan remains secured by all real and personal property of the borrowing subsidiary and its subsidiaries but is subordinated to all other existing lenders. At December 31, 2022, financial covenant calculations were not applicable to us as we met the minimum cash requirements under the amended terms of the agreement.

As described in [Note 20](#), on March 16, 2023, we repaid \$4.5 million of the Subordinated Term Loan, placed the remaining balance in escrow, and provided 30-day notice of repayment to the lender.

Commercial Premium Finance Notes

In June 2022 and December 2022, we entered into financing agreements related to the premiums of certain insurance policies. These notes each have a one year term and bear interest at 3.99% and 6.74%, respectively.

Vehicle and Equipment Notes

We have eighteen vehicle and equipment notes outstanding at December 31, 2022 primarily relating to motor vehicles and warehouse equipment. We make monthly payments on these notes at interest rates ranging from 4.39% to 6.32%.

Mortgage Notes

We have two mortgage notes secured by residential property. These notes bear interest at 6.5% and 5.25%, respectively, with maturity dates in October 2023 and March 2025.

Asset-based Lending Arrangement

On April 29, 2021, we entered into a credit facility (“Credit Agreement”) with Truist Bank that includes a \$20.0 million variable interest rate asset-based lending arrangement and a \$1.0 million capital expenditure line of credit with customary terms and conditions. The amount of the revolving commitment available for borrowing at any given time was subject to a borrowing base formula that was based upon our qualifying accounts receivable and inventory. This Credit Agreement was scheduled to expire on April 29, 2026.

On August 5, 2022, we entered into an agreement with Truist Bank to pay off the Credit Agreement and terminate Truist's lending obligations thereunder. Given the restrictive covenants contained in the Credit Agreement, this facility did not provide sufficient liquidity to justify the ongoing costs of maintaining it. We incurred a loss on early extinguishment of debt in the year ended December 31, 2022 of \$1.5 million in connection with this termination, including the write off of \$1.4 million in unamortized debt issuance costs.

Paycheck Protection Program Loan

We had previously received \$1.8 million under the Paycheck Protection Program (“PPP Loan”). During 2021, our PPP Loan was forgiven, and we received the escrow balance, net of associated fees, of \$1.8 million and recognized a gain of \$1.8 million.

Cash Maturities

As of December 31, 2022, the future cash maturities of long-term debt are as follows:

<i>(in thousands)</i>	Amount
Years Ended December 31,	
2023	\$ 1,972
2024	10,311
2025	248
2026	261,069
2027	17
Thereafter	24,700
Total future maturities	<u>\$ 298,317</u>

Senior Secured Term Loan

On March 17, 2023, we closed a \$130 million principal value senior secured term loan (“Senior Secured Term Loan”). Additional details related to the Senior Secured Term Loan are described in [Note 20](#).

Note 13. Equity

Common Stock

The following table summarizes the common stock activity for the years ended December 31, 2022 and 2021:

	Years Ended December 31,	
	2022	2021
Balance, beginning of period	100,687,820	84,535,640
Issuance of common stock	1,116,634	16,152,180
Balance, end of period	101,804,454	100,687,820

Preferred Stock

We are authorized to issue up to 10,000,000 shares of preferred stock, each with a par value of \$0.0001 per share. As of December 31, 2022 and 2021, no shares of preferred stock were issued or outstanding.

Capped Call Options

On December 16, 2021, in connection with the Convertible Notes, we entered into Capped Calls for \$35.0 million, which was recorded as a reduction of additional paid-in capital. For more details, see [Note 12](#).

Public Warrants

At December 31, 2020, there were 10,000,000 outstanding Public Warrants to purchase shares of our common stock. Each warrant entitled the holder to purchase one share of our common stock at a price of \$11.50.

On June 16, 2021, we redeemed 50,965 Public Warrants, which included all unexercised Public Warrants. Prior to the redemption, 12,033,169 Public Warrants, including some Public Warrants that had initially been Private Warrants, were exercised. Net of fees, we collected \$138.2 million in connection with these exercises and redemptions. The Public Warrants had qualified as equity instruments, and we had recorded their fair value as additional paid-in capital.

Non-Plan Legacy Danimer Options and Warrants

Prior to 2017, Legacy Danimer had issued 208,183 stock options that were not a part of either the 2016 Executive Plan or the 2016 Omnibus Plan. These options had a weighted average exercise price of \$30 per share. On December 29, 2020, the then-remaining 30,493 of these options were converted to options to purchase 279,255 shares of our common stock with a weighted average exercise price of \$3.28 per share. During 2021, 153,763 of these options were exercised. There were 125,489 Legacy Danimer options remaining outstanding at December 31, 2022.

As of December 29, 2020, Legacy Danimer had 55,319 warrants outstanding with an exercise price of \$30 per share. In connection with the Business Combination, these warrants were converted to options to purchase 506,611 shares of our common stock with an exercise price of \$3.28 per share. These options were exercised during 2021 on a cashless basis by issuing 435,961 shares of common stock. There were no Legacy Danimer warrants remaining outstanding at December 31, 2022.

Equity Distribution Agreement

On September 7, 2022, we entered into an equity distribution agreement (“Equity Distribution Agreement”) with Citigroup Global Markets Inc. as Manager, under which we may issue and sell shares of our Class A common stock “at the market” from time-to-time with an aggregate offering price of up to \$100.0 million (collectively the “ATM Offering”). Under the Equity Distribution Agreement, the Manager may sell small volumes of our common stock at the prevailing market price, during such times and at such terms as we have predesignated. We have no obligation to sell any shares and may at any time suspend offers and sales that are part of the ATM Offering or terminate the Equity Distribution Agreement. During the year ended December 31, 2022, we issued 212,604 shares at an average price of \$4.15 per share resulting in proceeds of \$0.9 million. Additionally, we incurred issuance costs of \$1.1 million, which were primarily one-time costs, but which also included less than \$0.1 million in commissions to the Manager. As of December 31, 2022, \$99.1 million remains available for distribution under the Equity Distribution Agreement.

Anti-dilutive Instruments

The following instruments were excluded from the calculation of diluted shares outstanding because the effect of including them would have been anti-dilutive.

	Years Ended December 31,	
	2022	2021
Convertible debt	22,250,040	22,250,040
Employee stock options	11,844,644	10,589,010
Private Warrants	3,914,525	3,914,525
Restricted shares and RSUs	2,209,288	2,529,732
Performance shares	50,251	-
Legacy Danimer options	125,489	125,489
Total excluded instruments	<u>40,394,237</u>	<u>39,408,796</u>

Dividends

We have not paid any cash dividends on the common stock to date, and we have no plans to do so. Any decision to declare dividends in the future will be made at the discretion of the Board of Directors and will depend on, among other things, our results of operations, financial condition, cash requirements, contractual restrictions, and other factors that the Board may deem relevant. In addition, our ability to pay dividends are limited by covenants of our existing indebtedness and may be further restricted by an additional indebtedness we may incur.

Senior Secured Term Loan Warrants

As described in [Note 20](#), we issued warrants to purchase 1.5 million of our common shares for \$7.50 per share in connection with a financing transaction executed on March 17, 2023.

Note 14. Revenue

We evaluate financial performance and make resource allocation decisions based upon the results of our single operating and reportable segment; however, we believe presenting revenue split between our primary revenue streams of products and services best depicts how the nature, amount, timing and certainty of our net sales and cash flows are affected by economic factors.

We defer certain contract fulfillment costs. These costs are amortized to cost of revenue on a per-pound basis as we sell the related product. During 2022 and 2021, we charged \$0.5 million and \$0.8 million, respectively, of fulfillment costs to cost of revenue. At December 31, 2022 and December 31, 2021, we had recorded gross contract assets of \$3.4 million and \$2.5 million, respectively, related to these fulfillment costs.

Our R&D services contract customers generally pay us at the commencement of the agreement and then at additional intervals as outlined in each contract. We recognize contract liabilities for such payments and then recognize revenue as we satisfy the related performance obligations. To the extent collectible revenue recognized under this method exceeds the consideration received, we recognize contract assets for such unbilled consideration.

The following table shows the significant changes in the R&D contract asset and contract liability balances.

	December 31,		December 31,	
	2022		2021	
<i>(in thousands)</i>	Contract Assets	Contract Liabilities	Contract Assets	Contract Liabilities
Beginning balance	\$ 2,128	\$ (214)	\$ -	\$ (2,115)
Revenue recognized	3,446	2,364	2,128	4,157
Consideration received	(1,594)	(2,150)	-	(2,256)
Reserves recorded	(1,215)	-	-	-
Ending balance	<u>\$ 2,765</u>	<u>\$ -</u>	<u>\$ 2,128</u>	<u>\$ (214)</u>

Concentration of Risk

We have a relatively low number of customers. At December 31, 2022, and 2021, our top five customers collectively represented approximately 87% and 73% of total accounts receivable, respectively.

In 2022, we had two customers that each individually accounted for more than 10% of total revenue and that collectively represented 40% of total revenue. In 2021, we had two customers that each individually accounted for more than 10% of total revenue and that collectively represented 35% of total revenue.

Disaggregated Revenues

Revenue by geographic areas is based on the location of the customer. The following is a summary of revenue information by major geographic area:

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Domestic	\$ 45,802	\$ 43,264
Belgium	3,052	5,119
Germany	2,906	6,618
Austria	888	159
Poland	311	79
Switzerland	79	2,605
All other countries	180	905
Total revenues	<u>\$ 53,218</u>	<u>\$ 58,749</u>

Note 15. Stock-based Compensation

We grant various forms of stock-based compensation, including restricted stock, restricted stock units, stock options and performance-based restricted stock units under our Danimer Scientific, Inc. 2020 Long-Term Equity Incentive Plan (“2020 Incentive Plan”) and employee stock purchase plan instruments under our 2020 Employee Stock Purchase Plan (“2020 ESPP”).

The following table sets forth the allocation of our stock-based compensation expense.

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Cost of revenue	\$ 60	\$ 109
Selling, general and administrative	49,387	48,782
Research and development	7,321	7,017
Total stock-based compensation	<u>\$ 56,768</u>	<u>\$ 55,908</u>

Legacy Danimer Stock Incentive Plans

Prior to the Business Combination, the Board of Directors of Legacy Danimer approved the 2016 Director and Executive Officer Stock Incentive Plan (“2016 Executive Plan”) and the 2016 Omnibus Stock Incentive Plan (“2016 Omnibus Plan”). The 2016 Executive Plan provided for the granting of stock options to directors and executive officers of Legacy Danimer. The 2016 Omnibus Plan provided for the grant of stock options to employees and consultants. In addition, Legacy Danimer had issued stock options and warrants (“Non-Plan Legacy Danimer Options and Warrants”) that were not subject to the above option plans.

As a result of the Business Combination, our stockholders approved the 2020 Incentive Plan. In accordance with the Merger Agreement, the Board also approved assuming all outstanding equity-based awards granted under the 2016 Executive Plan and 2016 Omnibus Plan and converting those awards into equity-based awards in our common stock effective upon the consummation of the Business Combination, based on exchange ratios established in the Merger Agreement, and with the same general terms and conditions corresponding to the original awards.

We rolled forward all outstanding options granted under the 2016 Executive Plan and 2016 Omnibus Plan into the same type of equity-based awards under the 2020 Incentive Plan effective upon the consummation of the Business Combination. The awards under the 2016 Executive Plan and 2016 Omnibus Plan have been retroactively restated as awards reflecting the exchange ratio established in the Merger Agreement.

Our Board approved, as of August 11, 2021, the assumption of the remaining authorized but unissued 289,951 shares (as adjusted by the merger consideration exchange ratio in connection with the acquisition of Novomer) under the Novomer legacy stock incentive plan into our 2020 Incentive Plan. On January 16, 2022, our Board approved the assumption of the remaining authorized but unissued 2,895,411 shares under the 2016 Executive Plan and the 2016

Omnibus Plan (as adjusted by the merger consideration exchange ratio in connection with the Business Combination) into our 2020 Incentive Plan.

2020 Incentive Plans

The 2020 Incentive Plan provides for the grant of stock options, stock appreciation rights, and full value awards. Full value awards include restricted stock, restricted stock units (“RSUs”), deferred stock units, performance stock and performance-based restricted stock units (“PRSUs”). At December 31, 2022, 1,689,744 shares of our common stock remained available to be issued with respect to awards under the 2020 Incentive Plan. This limit is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

Under the 2020 ESPP, there are 2,403,392 authorized but unissued or reacquired shares of common stock reserved for issuance. During 2022 and 2021, we issued 78,167 and 5,013 shares, respectively, under the 2020 ESPP.

Service-based Restricted Stock and RSUs

A summary of service-based condition only restricted stock and RSU activity under our equity plans follows:

	Number of Shares	Weighted Average Grant-Date Fair Value
Balance, December 31, 2020	-	\$ -
Granted	1,517,836	\$ 37.09
Vested	(505,944)	\$ 37.09
Balance, December 31, 2021	<u>1,011,892</u>	\$ 37.09
Granted	191,751	\$ 4.93
Vested	(505,945)	\$ 37.09
Forfeited	(6,250)	\$ -
Balance, December 31, 2022	<u>691,448</u>	\$ 28.51

We recognize compensation expense for these awards on straight-line basis from the grant date through the relevant vesting dates, which range from one to three years. We recognized \$19.2 million and \$18.8 million of such expense during 2022 and 2021, respectively. The total fair value of restricted stock and RSU awards that vested during 2022 and 2021 was \$0.9 million and \$4.1 million, respectively.

Market-based Restricted Stock

During 2021, we also granted 1,517,840 shares of restricted stock for which the restrictions lapse on successive thirds of the award on the first date the volume-weighted average price per share of our common stock equals or exceeds \$24.20 for any 20 trading dates within 30-day trading periods beginning on December 29, 2021, 2022, and 2023, respectively. We recognize the compensation expense for these shares on a straight-line basis from the grant date through January 2024. We recognized \$18.5 million and \$18.7 million of expense during 2022 and 2021, respectively, and all of these shares remained outstanding at December 31, 2022.

Performance-based Restricted Stock Units

On March 31, 2022, we awarded 489,949 PRSUs with a weighted average grant-date fair value of \$5.86. These PRSUs are unvested until attainment of performance targets defined in the grant agreement as follows:

- 30% of the shares are subject to a total PHA revenue metric based on 2024 financial results. 50% of these shares vest if total PHA revenue is \$151 million, 100% vest if total PHA revenue is \$189 million or higher, with prorated vesting between \$151 million and \$189 million.
- 30% of the shares are subject to an Adjusted EBITDA metric based on 2024 financial results. 50% of these shares vest if Adjusted EBITDA is \$9.2 million, 100% vest if Adjusted EBITDA is \$13.8 million or higher, with prorated vesting between \$9.2 million and \$13.8 million.
- 40% of the shares are subject to a Neat PHA production capacity metric based on a third-party assessment at December 31, 2024, 50% of the shares vest if capacity is 68 million pounds, 100% vest if capacity is 81 million pounds or higher, with prorated vesting between 68 million pounds and 81 million pounds.

On July 23, 2021, we awarded 95,943 PRSUs with a weighted average grant-date fair value of \$18.24. These PRSUs are unvested until attainment of performance targets defined in the grant agreement as follows:

- 30% of the shares are subject to a return on equity "ROE" metric based on 2023 financial results, with 50% to 100% of these shares vesting proportionately to achieved ROE of 5% to 9%.
- 30% of the shares are subject to an EBITDA Metric based on 2023 financial results, with 50% to 100% of these shares vesting proportionately to achieved EBITDA of \$45 million to \$65 million.
- 40% of the shares are subject to a Neat PHA production capacity metric based on a third-party assessment at December 31, 2023, with 50% to 100% of the shares vesting proportionately to achieved capacity of 75 million pounds to 90 million pounds.

In addition to these performance conditions, vesting of certain PRSUs is also subject to having sufficient capacity in the 2020 Incentive Plan, which may not have enough shares remaining to fulfill these awards. In the event registered shares are unavailable, 535,641 of the 585,892 outstanding PRSUs must be settled in cash as calculated using the price of our common stock on the vesting date. Due to this cash settlement feature, certain PRSUs are accounted for as liabilities that are marked to market using the price of our common stock at the end of each reporting period with a life-to-date expense adjustment. At December 31, 2022 and 2021, the long-term liability for these PRSUs was \$0.3 million and \$0.1 million. During 2022 and 2021, we recognized related compensation expense of \$0.2 million and \$0.1 million, respectively, which we included in selling, general and administrative expenses. Other than this mark to market effect, expense is recognized on a straight-line basis between the dates of grant and the vesting dates, which we anticipate will be in February 2024 and March 2025, respectively. All of these PRSUs remained outstanding at December 31, 2022.

Stock Options

A summary of stock option activity under our equity plans follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance, December 31, 2020	11,008,533	\$ 13.94	8.38	\$ 105,341,482
Granted	335,896	\$ 19.32		
Exercised	(723,369)	\$ 3.31		\$ 23,188,428
Forfeited	(32,050)			
Balance, December 31, 2021	<u>10,589,010</u>	\$ 14.85	7.39	\$ 22,473,835
Granted	1,056,798	\$ 3.99		
Exercised	(60,000)	\$ 3.28		\$ 99,600
Forfeited	(53,422)			
Transferred from liability-based awards	312,258	\$ 2.68		
Balance, December 31, 2022	<u>11,844,644</u>	\$ 14.23	6.71	\$ -
Exercisable	4,473,003	\$ 4.84	4.27	\$ -
Vested and expected to vest	11,844,644	\$ 14.23	6.71	\$ -

The aggregate intrinsic values are calculated as the difference between the exercise price of the indicated stock options and the fair value of our common stock on the respective exercise dates or on December 31, as applicable.

The weighted average grant-date fair values of options granted during 2022 and 2021 were \$1.81 and \$8.40, respectively.

In addition to the stock options granted under our equity plans, during 2022, we granted 972,222 stock options that contained a cash-settlement feature if adequate shares were not available in these plans to settle the awards by the vesting dates. During 2021, we granted 1,710,947 options that vest ratably on the three successive anniversaries of the grant date with the same cash-settlement feature. During 2022, as the result of the aforementioned assumption of the remaining authorized but unissued shares into the 2020 Incentive Plan, we reclassified 312,258 of these options with a cash-settlement feature to share settled. During 2022 and 2021, we recognized a benefit of \$0.3 million and expense of \$0.5 million, respectively, and reported long-term liabilities of \$0.1 million and \$0.5 million, respectively, related to these stock options at December 31, 2022 and 2021.

As of December 31, 2022, there was \$58.8 million of unrecognized compensation cost related to unvested stock options and restricted shares granted under the 2020 Incentive Plan. That cost is expected to be recognized over a weighted-average period of 2.1 years.

Note 16. Income Taxes

The significant components of our income tax benefits were as follows:

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Current tax expense		
Federal	\$ -	\$ -
State	4	-
Total current expense	<u>4</u>	<u>-</u>
Deferred tax (benefit) expense		
Federal	(587)	(11,462)
State	(227)	(1,771)
Total deferred benefit	<u>(814)</u>	<u>(13,233)</u>
Total income tax benefit	<u>\$ (810)</u>	<u>\$ (13,233)</u>

A reconciliation of our effective tax rate and federal statutory tax rate is summarized as follows:

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Federal income tax benefit at statutory federal rate	\$ (37,919)	\$ (15,401)
State income tax benefit, net of federal taxes	(2,363)	(1,307)
Gain on measurement of private warrants	(1,967)	(5,831)
Transaction costs	-	475
Revisions to prior years' estimates	(4,052)	(1,744)
Stock-based compensation	3,803	474
Other permanent differences	29	11
Impairment of goodwill	13,159	-
Officers' salary 162(m) limitation	5,378	7,291
PPP loan forgiveness	-	(373)
Change in state rates	687	155
Valuation allowance	22,435	3,017
Total income tax benefit	<u>\$ (810)</u>	<u>\$ (13,233)</u>

Significant components of our deferred tax assets and deferred tax liabilities are summarized as follows:

<i>(in thousands)</i>	December 31,	
	2022	2021
Deferred tax assets		
Net operating loss carryforwards	\$ 58,374	\$ 39,408
Stock-based compensation	6,860	3,652
Lease liability	6,067	5,953
Capitalized research and development	3,678	-
Tax credits	926	992
Inventory reserve	673	577
Allowance for doubtful accounts	579	120
Contribution and AMT carryforwards	37	34
Interest limitation	4	65
Legal settlement accrual	-	286
Deferred revenue	-	49
Other	19	325
Gross deferred tax assets	77,217	51,461
Deferred tax liabilities		
Right-of-use assets	(4,536)	(4,400)
Depreciation and amortization	(25,267)	(22,896)
Gross deferred income tax liabilities	(29,803)	(27,296)
Valuation allowance	(47,614)	(25,179)
Net deferred income tax liabilities	\$ (200)	\$ (1,014)

We have net deferred tax assets relating primarily to net operating loss (NOL) carryforwards. Beginning in 2022, the Tax Cuts and Jobs Act of 2017 requires taxpayers to capitalize and amortize research and development expenditures over five years for domestic research pursuant to Section 174 of the Internal Revenue Code ("Code"). Subject to certain limitations, the Company may use these deferred tax assets to offset taxable income in future periods. Due to our history of losses and uncertainty regarding future earnings, a valuation allowance has been recorded against our deferred tax assets, as it is more likely than not that such assets will not be realized.

We performed scheduling of the estimated realization for our deferred tax assets and liabilities to estimate the amount of valuation allowance required. The following details the activity in the valuation allowance for 2022 and 2021:

<i>(in thousands)</i>	Beginning Balance	Business Combinations	Additions	Amounts Utilized	Ending Balance
2021	\$ 19,050	3,112	3,017	-	\$ 25,179
2022	\$ 25,179	-	22,435	-	\$ 47,614

As of December 31, 2022 and 2021, we had federal net operating loss carryforwards of \$226 million and \$156 million, respectively, available to offset future taxable income. We had state net operating loss carryforwards as of December 31, 2022 and 2021 of \$223 million and \$173 million, respectively. A significant portion of our net operating loss carryforwards were generated prior to 2018 and are subject to statutory limitations on annual utilization and will expire at various times during the tax years from 2028 through 2036. The net operating loss carryforwards generated after 2017 will carryforward indefinitely, but the deductibility of such NOLs is limited to 80% of taxable income for federal and state income tax purposes. As of December 31, 2022, we also had federal and state research and development tax credit carryforwards of \$0.9 million. Pursuant to Sections 382 and 383 of the Code, the annual use of our NOL and research and development credit carryforwards is limited and could be further limited in the event that a cumulative change in ownership of more than 50% occurs within a three-year period.

The Inflation Reduction Act of 2022, which incorporates a Corporate Alternative Minimum Tax (“CAMT”), was signed on August 16, 2022. The changes will become effective for the tax years beginning after December 31, 2022. The CAMT will require us to compute two separate calculations for federal income tax purposes and pay the greater of the new minimum tax or their regular tax liability. The act is not expected to have a significant impact on our financial position, results of operations or cash flows.

We did not have any material unrecognized tax benefits for the years ended December 31, 2022 and 2021. Our policy is to include interest and penalties as a component of income tax expense. We have no accruals for interest or penalties in the accompanying consolidated balance sheets as of December 31, 2022 and 2021 and have not recognized interest or penalties in the accompanying consolidated statements of operations for the years ended December 31, 2022 and 2021.

We file a consolidated U.S. federal income tax return and various state and local income tax returns. Due to the net operating loss carryforwards, our tax returns are open to examination from 2008 and forward. We have not been, nor are currently, under examination by the federal or any state tax authority.

Note 17. Retirement Plans

We maintain a defined contribution retirement plan (“Plan”) for the benefit of employees who meet certain age and employment criteria. Contributions to the Plan include both a match of 100% of employee contributions up to 4% of each eligible employee’s compensation and may include, from time to time, a discretionary amount. Our matching expense was \$0.8 million and \$0.5 million for 2022 and 2021, respectively; there were no discretionary contributions during these years.

Note 18. Supplemental Cash Flows

Supplemental cash flow information is presented below.

<i>(in thousands)</i>	Years Ended December 31,	
	2022	2021
Supplemental cash flow information:		
Cash paid for interest, net of interest capitalized	\$ 395	\$ 512
Cash paid for operating leases	\$ 3,543	\$ 3,346
Supplemental non-cash disclosure:		
Changes in accounts payable and accrued liabilities related to purchase of PP&E	\$ (12,055)	\$ 16,103
Financing of notes payable	\$ 3,266	\$ -
Inventory consumed in constructing property, plant and equipment	\$ 3,034	\$ -
Forgiveness of debt	\$ -	\$ 1,776

Note 19. Commitments and Contingencies

Commitments

In connection with our 2007 acquisition of certain intellectual property, we agreed to pay royalties to The Procter and Gamble Group (“P&G”) upon the production of PHA. The royalty is \$0.05 per pound for the first 500 million pounds of PHA produced and decreases to \$0.025 per pound for cumulative production in excess of that amount until the underlying patents expire on September 8, 2027, unless earlier terminated. We incurred \$0.4 million and \$0.3 million in royalty expense during 2022 and 2021, respectively.

In November 2015, we terminated a former executive and terminated our contract with an advisory firm (“Advisory Contract”), pursuant to which we, through the advisory firm, engaged the individual as an executive of the Company. In December 2015, we deemed the Advisory Contract, together with all related arrangements in connection therewith, void, including any share issuances in connection with such arrangements. We filed suit against the former executive and the advisory firm during 2016, and various counterclaims were filed by the former executive and the advisory firm. During the third quarter of 2020, this matter was settled, we agreed to pay \$8 million to resolve all outstanding claims, the executive agreed to the cancellation of any shares issued to him pursuant to the Advisory Contract and related arrangements, and the parties exchanged of mutual releases. The final payment was made during the fourth quarter of 2022. The unpaid balance of \$1.25 million at December 31, 2021 was included in accrued liabilities.

Litigation Matters

On May 14, 2021, a class action complaint was filed by Darryl Keith Rosencrants in the United States District Court for the Eastern District of New York, on May 18, 2021, a class action complaint was filed by Carlos Caballeros in the United States District Court for the Middle District of Georgia, on May 18, 2021, a class action complaint was filed by Dennis H. Wilkins also in the United States District Court for the Middle District of Georgia, and on May 19, 2021, a class action complaint was filed by Elizabeth and John Skistimas in the United States District Court for the Eastern District of New York. Each plaintiff or plaintiffs brought the action individually and on behalf of all others similarly situated against the Company.

The alleged class varies in each case but covers all persons and entities other than Defendants who purchased or otherwise acquired our securities between October 5, 2020 and May 4, 2021 (“Class Period”). Plaintiffs are seeking to recover damages caused by Defendants’ alleged violations of the federal securities laws and are pursuing remedies under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), and Rule 10b-5 promulgated thereunder. The complaints are substantially similar and are each premised upon various allegations that throughout the Class Period, Defendants made materially false and misleading statements regarding, among other things, our business, operations and compliance policies.

Plaintiffs seek the following remedies: (i) determining that the lawsuits may be maintained as class actions under Rule 23 of the Federal Rules of Civil Procedure, (ii) certifying a class representative, (iii) requiring Defendants to pay damages allegedly sustained by plaintiffs and the class members by reason of the acts alleged in the complaints, and (iv) awarding pre-judgment and post-judgment interest as well as reasonable attorneys’ fees, expert fees and other costs.

On July 29, 2021, the Georgia court transferred the Georgia cases to New York, and all four class actions have been consolidated into a single lawsuit in the Eastern District of New York.

On January 19, 2022, a Consolidated Amended Class Action Complaint (“Amended Complaint”) was filed in the Eastern District of New York, naming as defendants the Company, its directors and certain of its officers as well as certain former directors (collectively, “Defendants”). The Amended Complaint is brought on behalf of a class consisting of (i) purchasers of shares of the Company during the Class Period, (ii) all holders of the Company’s Class A common stock entitled to vote on the merger transaction between the Company and Meredian Holdings Group, Inc. consummated on December 28, 2020 and (iii) purchasers of Company securities pursuant to the Company’s Registration Statement on Form S-4 that was declared effective on December 16, 2020 or the Company’s Registration Statement on Form S-1 that was declared effective on February 16, 2021. The Amended Complaint asserts claims for violations of Sections 10(b), 14(a) and 20(a) of the Exchange Act and Rules 10(b)-5(a)-(c) promulgated thereunder and Sections 11, 12 and 15 of the Securities Act of 1933, as amended (the “Securities Act”). Plaintiffs seek the following remedies: (a) a determination that the lawsuit is a proper class action pursuant to Rule 23 of the Federal Rules of Civil Procedure and certifying Plaintiffs as class representative, (b) awarding compensatory and punitive damages allegedly sustained by the class members by reason of the acts set forth in the Amended Complaint and (c) awarding pre-judgment and post-judgment interest and costs and expenses, including reasonable attorneys’ fees, experts’ fees and other costs.

The Defendants filed a motion to dismiss the Amended Complaint on May 20, 2022. Plaintiffs served their opposition papers to the motion to dismiss on July 21, 2022, and Defendants filed a reply on September 6, 2022. The court has yet to rule on the motion to dismiss. In their opposition papers, Plaintiffs have now confirmed that, based on Defendants’ arguments in the motion to dismiss, Plaintiffs have dropped seven of the nine counts, eliminating all of the Securities Act counts specifically relating to the proxy solicitation, registration statements and related control person claims, and all that now remains are the first two counts under Rules 10(b)-5(a)-(c) of the Exchange Act and control person liability. Additionally, all of the Defendants other than Danimer and three of its current or former officers or directors have been dismissed from the case.

On May 24, 2021, a shareholder derivative lawsuit was filed in the Court of Chancery of the State of Delaware by Richard Delman on behalf of the Company, alleging breach of fiduciary duty against the Company’s directors. On October 6, 2021, a shareholder derivative lawsuit was filed in the United States District Court for the District of Delaware by Ryan Perri on behalf of the Company, alleging breach of fiduciary duty against the Company’s directors. On February 9, 2023, a shareholder derivative lawsuit was filed in the United States District Court for the District of Delaware by Samuel Brezenin on behalf of the Company, alleging breach of fiduciary trust against the Company’s directors. All three shareholder derivative lawsuits have been stayed pending the outcome of Defendants’ motion to

dismiss the securities class actions. These derivative complaints repeat certain allegations which are already in the public domain. Defendants deny the allegations of the above complaints, believe the lawsuits are without merit and intend to defend them vigorously.

Since we are unable to estimate the likelihood of incurring a loss, or the amount of loss, if any, related to these matters, we have not accrued any losses for these matters at December 31, 2022.

On May 5, 2021, we received a letter from the Atlanta regional office of the SEC, in connection with a non-public, fact-finding inquiry, requesting that we voluntarily produce certain specified information, to which we timely and voluntarily produced the requested information on July 14, 2021. Subsequently, the SEC had additional follow-up requests for further information, and we have timely and voluntarily responded to all such requests.

On March 17, 2023, the Delaware Court of Chancery validated our Fourth Amended and Restated Certificate of Incorporation and share issuances thereunder in response to our petition as described in [Note 20](#).

In the ordinary course of business, we may be a party to various other legal proceedings from time to time.

Note 20. Subsequent Events

Subordinated Term Loan

On March 16, 2023, we entered into an agreement to pay off a portion of the Subordinated Term Loan in the amount of \$4.5 million as well as accrued interest of \$0.1 million.

On March 17, 2023, we placed \$5.6 million representing principal and accrued interest into an escrow account and provided irrevocable notice to the remaining lender under the terms of the Subordinated Term Loan to pay off the remainder of this loan on or about April 17, 2023. Upon repayment of this balance, the Subordinated Term Loan will be terminated.

Senior Secured Term Loan

On March 17, 2023, we closed a \$130 million principal amount Senior Secured Term Loan. The Senior Secured Term Loan matures on the earlier of March 17, 2027 or September 15, 2026 if more than \$100 million of the existing Convertible Notes remains outstanding on that date. After payment of the lender's expenses, including the first three years of premiums for a collateral protection insurance policy for the benefit of the lender, we received net proceeds of \$98.6 million. The Senior Secured Term Loan accrues interest at a fixed annual rate of 14.4%. As part of the Senior Secured Term Loan agreement, we are required to hold certain interest payments in a restricted reserve account, which resulted in reclassifying \$12.5 million of cash and cash equivalents to restricted cash as of the closing date.

We issued warrants with a five-year maturity to the lender to purchase 1.5 million shares of our common stock at an exercise price of \$7.50 per share. We determined the fair value of these warrants as of the closing date was \$0.5 million using the Black Scholes model.

The Senior Secured Term Loan is secured by substantially all of our assets, other than the tangible assets in Rochester, New York and the assets in Bainbridge, Georgia and Winchester, Kentucky that secure our NMTC loans. Once we obtain consents from certain NMTC lenders, the Bainbridge, Georgia (excluding the Greenfield Facility) and Winchester, Kentucky assets will also secure the Senior Secured Term Loan and the Senior Secured Term Loan lender will release its lien on the intellectual property of Danimer Catalytic Technologies.

The Senior Secured Term Loan is subject to a financial covenant requiring a minimum cash balance of \$45 million that will be released once we receive the consent from the Winchester, Kentucky NMTC lender. We expect the consent process will be completed in May 2023.

Delaware Section 205 Petition

On March 17, 2023, the Delaware Court of Chancery heard our petition under Section 205 of the General Corporation Law of the State of Delaware and issued a final order validating (i) our Fourth Amended and Restated Certificate of Incorporation ("Charter"), including the amendment to our capitalization effected thereunder, declaring it effective as of December 20, 2020, and (ii) all shares of our capital stock issued in reliance on the effectiveness of the Charter, effective as of the dates and times of the original issuances of such shares. Although we had not received any complaints, we filed the petition after a recent decision by the Delaware Court of Chancery that created potential uncertainty with respect to the charters of certain Delaware companies that had accessed public capital markets through a so-called "de-SPAC" transaction in the past several years, including us.

SUBSIDIARIES OF DANIMER SCIENTIFIC, INC.

The following are subsidiaries of Danimer Scientific, Inc. as of December 31, 2022 and the jurisdictions in which they are organized.

Company	State or Jurisdiction of Incorporation/Organization
Meridian Holdings Group, Inc.	Delaware
Danimer Scientific Holdings, LLC	Delaware
Danimer Scientific Manufacturing Inc.	Delaware
Meridian, Inc.	Georgia
Danimer Scientific L.L.C.	Georgia
Danimer Scientific Kentucky, Inc.	Delaware
Novomer, Inc. (f/k/a Sunshine Merger Corp.)	Delaware
Meridian Bioplastics, Inc.	Georgia
Danimer Bioplastics, Inc.	Georgia

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-254085 and 333-264031) on Form S-8 and (No. 333-267074) on Form S-3 of our report dated March 28, 2023, with respect to the consolidated financial statements of Danimer Scientific, Inc.

/s/ KPMG LLP

Atlanta, Georgia
March 28, 2023

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Stephen E. Croskrey, certify, as of the date hereof, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Danimer Scientific, Inc. on Form 10-K for the fiscal year ended December 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Danimer Scientific, Inc. at the dates and for the periods indicated.

Date: March 28, 2023

By: /s/ Stephen E. Croskrey

Stephen E. Croskrey
Chief Executive Officer
(Principal Executive Officer)

I, Michael A. Hajost, certify, as of the date hereof, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Danimer Scientific, Inc. on Form 10-K for the fiscal year ended December 31, 2022 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Danimer Scientific, Inc. at the dates and for the periods indicated.

Date: March 28, 2023

By: /s/ Michael A. Hajost

Michael A. Hajost
Chief Financial Officer
(Principal Financial Officer)