

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2021

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 1-10258

TREDEGAR CORPORATION
(Exact name of registrant as specified in its charter)

Virginia
(State or other jurisdiction
of incorporation or organization)

54-1497771
(I.R.S. Employer
Identification No.)

1100 Boulders Parkway,

Richmond, Virginia
(Address of principal executive offices)

23225
(Zip Code)

Registrant's telephone number, including area code: 804-330-1000
Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock	TG	New York Stock Exchange

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

None

(Title of class)

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 Section 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, a 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="radio"/>	Accelerated filer	<input checked="" type="radio"/>	Smaller reporting company	<input type="radio"/>
Non-accelerated filer	<input type="radio"/>			Emerging growth company	<input type="radio"/>

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.

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

Aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant as of June 30, 2021 (the last business day of the registrant's most recently completed second fiscal quarter): \$365,890,037*

Number of shares of Common Stock outstanding as of March 4, 2022: 33,743,617

* In determining this figure, an aggregate of 7,142,062 shares of Common Stock beneficially owned by Floyd D. Gottwald, Jr., John D. Gottwald, William M. Gottwald and the members of their immediate families has been excluded because the shares are deemed to be held by affiliates. The aggregate market value has been computed based on the closing price in the New York Stock Exchange on June 30, 2021.

Documents Incorporated By Reference

Portions of the Tredegar Corporation Proxy Statement for the 2022 Annual Meeting of Shareholders (the "Proxy Statement") are incorporated by reference into Part III of this Form 10-K.

**Index to Annual Report on Form 10-K
Year Ended December 31, 2021**

		Page
Part I		
Item 1.	Business	1
Item 1A.	Risk Factors	5
Item 1B.	Unresolved Staff Comments	10
Item 2.	Properties	10
Item 3.	Legal Proceedings	11
Item 4.	Mine Safety Disclosures	11
Part II		
Item 5.	Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	12
Item 6.	[RESERVED]	13
Item 7.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	13
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk	32
Item 8.	Financial Statements and Supplementary Data	32
Item 9.	Changes In and Disagreements With Accountants on Accounting and Financial Disclosure	32
Item 9A.	Controls and Procedures	32
Item 9B.	Other Information	34
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	34
Part III		
Item 10.	Directors, Executive Officers and Corporate Governance	35
Item 11.	Executive Compensation	35
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	35
Item 13.	Certain Relationships and Related Transactions, and Director Independence	36
Item 14.	Principal Accounting Fees and Services	36
Part IV		
Item 15.	Exhibits and Financial Statement Schedules	37
Item 16.	Form 10-K Summary	77

PART I

Item 1. BUSINESS

Description of Business

Tredegar Corporation (“Tredegar”) is engaged, through its subsidiaries, in the manufacture of aluminum extrusions, polyethylene (“PE”) plastic films and polyester (“PET”) films. Unless the context requires otherwise, all references herein to “Tredegar,” “the Company,” “we,” “us” or “our” are to Tredegar Corporation and its consolidated subsidiaries.

The Company’s reportable business segments are Aluminum Extrusions, PE Films and Flexible Packaging Films.

On October 30, 2020, the Company completed the sale of its personal care films business (“Personal Care Films”). The transaction excluded the packaging film lines and related operations located at the Pottsville, Pennsylvania manufacturing site (“Pottsville Packaging”), which are now being reported within the Surface Protection component of PE Films. Commencing in the third quarter of 2020, all historical results for Personal Care Films have been presented as discontinued operations.

In December 2020, the Company entered into a definitive agreement and completed the sale of Bright View Technologies (“Bright View”). The sale did not represent a strategic shift nor did it have a major effect on the Company’s historical and ongoing operations, thus all financial information for Bright View has been presented as continuing operations within the PE Films segment.

For more information on these transactions, see Note 15 “Discontinued Operations” to the Consolidated Financial Statements included in Item 15. “Exhibits and Financial Statement Schedules” (“Item 15”) of this Annual Report on Form 10-K for the year ended December 31, 2021 (“Form 10-K”).

Aluminum Extrusions

Aluminum Extrusions, also referred to as Bonnell Aluminum, produces high-quality, soft and medium-strength alloyed aluminum extrusions, custom fabricated and finished for the building and construction, automotive and transportation, consumer durables goods, machinery and equipment, electrical and renewable energy, and distribution markets. Bonnell Aluminum has manufacturing facilities located in the United States (“U.S.”).

Aluminum Extrusions manufactures mill (unfinished), machined, anodized and painted (finished) and fabricated aluminum extrusions for sale directly to fabricators and distributors. It also sells branded aluminum flooring trims under its Futura Transitions™ line and aluminum framing systems under its TSLOTS™ line. Aluminum Extrusions competes primarily on the basis of product quality, service and price. Sales are made predominantly in the U.S. The end-use markets for Aluminum Extrusions are cyclical and seasonal in nature.

The end-uses in each of Aluminum Extrusions’ primary market segments include:

Major Markets	End-Uses
Building & construction nonresidential	Commercial windows and doors, curtain walls, storefronts and entrances, automatic entry doors, walkway covers, ducts, louvers and vents, office wall panels, partitions and interior enclosures, acoustical walls and ceilings, point of purchase displays, pre-engineered structures, and flooring trims (Futura Transitions™)
Building & construction - residential	Residential windows and doors, shower and tub enclosures, railing and support systems, venetian blinds, and swimming pools
Automotive and transportation	Automotive and light truck structural components, spare parts, after-market automotive accessories, grills for heavy trucks, travel trailers and recreation vehicles
Consumer durables	Office furniture, pleasure boats, refrigerators and freezers, appliances and sporting goods
Machinery & equipment	Material handling equipment, conveyors and conveying systems, medical equipment, industrial fans and aluminum framing systems (TSLOTS™)
Distribution (metal service centers specializing in stock and release programs and custom fabrications to small manufacturers)	Various custom profiles including storm shutters, pleasure boat accessories, theater set structures and various standard profiles (including rod, bar, tube and pipe)
Electrical and renewable energy	Lighting fixtures, electronic apparatus, solar panel brackets and rigid and flexible conduits

Aluminum Extrusions' net sales (sales less freight) by market segment for the years ended December 31, 2021, 2020 and 2019 is shown below:

<i>% of Aluminum Extrusions Net Sales by Market Segment</i>			
	2021	2020	2019
Building and construction:			
Nonresidential	50%	56%	51%
Residential	10%	9%	8%
Automotive	8%	8%	9%
Specialty:			
Consumer durables	10%	10%	11%
Machinery & equipment	8%	7%	7%
Electrical	6%	4%	7%
Distribution	8%	6%	7%
Total	100%	100%	100%

In 2021, 2020 and 2019, Aluminum Extrusions net sales accounted for approximately 67%, 63% and 66% of Tredegar's consolidated net sales, respectively.

Backlog. Overall backlog in Aluminum Extrusions was approximately \$306.4 million at December 31, 2021 compared to approximately \$74.2 million at December 31, 2020, an increase of \$232.2 million, or approximately 313%. The increased backlog in 2021 compared to 2020 is primarily due to increased demand (33% increase in bookings), while experiencing a shortage of labor to meet existing demand and desired shipment levels. Net sales for Aluminum Extrusions, which the Company believes are cyclical in nature due to the seasonal nature of end-use markets, were \$539.3 million in 2021, \$455.7 million in 2020 and \$529.6 million in 2019.

Raw Materials. The primary raw materials used by Aluminum Extrusions consist of aluminum ingot, aluminum scrap and various alloys, which are purchased from domestic and foreign producers in open-market purchases and under annual contracts. Refer to *Quantitative and Qualitative Disclosures About Market Risk* in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Form 10-K ("Item 7") for additional information on aluminum price trends. Aluminum Extrusions believes that it has adequate supply agreements for aluminum raw materials in 2022 and is in the process of securing supply sources to meet expected needs in 2023. Aluminum Extrusions continues to navigate through supply chain issues for paint and other non-aluminum raw materials.

PE Films

PE Films produces surface protection films, polyethylene overwrap films and films for other markets. Tredegar's Surface Protection unit produces single- and multi-layer surface protection films sold under the UltraMask®, ForceField™, ForceField PEARL® and Pearl A™ brand names. These films, which are manufactured at facilities in the U.S. and China, support manufacturers of optical and other specialty substrates used in high-technology applications, most notably protecting high-value components of flat panel and flexible displays used in televisions, monitors, notebooks, smartphones, tablets, e-readers, automobiles and digital signage, during the manufacturing and transportation process. In 2021, 2020 and 2019, PE Films accounted for approximately 15%, 19% and 17% of Tredegar's consolidated net sales, respectively.

In October 2020, the Surface Protection unit assumed responsibility for Pottsville Packaging, which was previously reported within the Personal Care component of PE Films. Pottsville Packaging produces thin-gauge films as overwrap for bathroom tissue and paper towels.

Raw Materials. The primary raw materials used by PE Films are polyethylene and polypropylene resins. These raw materials are obtained from domestic and foreign suppliers at competitive prices. Refer to *Quantitative and Qualitative Disclosures About Market Risk* in Item 7 for additional information on resin price trends. PE Films believes that there will be an adequate supply of polyethylene and polypropylene resins in the foreseeable future.

Research and Development. Tredegar's spending for research and development ("R&D") activities in 2021, 2020 and 2019 was primarily related to PE Films. R&D spending by the PE Films was approximately \$5.7 million, \$7.7 million and \$7.0 million in 2021, 2020 and 2019, respectively.

Customers. PE Films' products are sold primarily in the U.S. and Asia, with the top four customers, collectively, comprising 88%, 84% and 86% of its net sales in 2021, 2020 and 2019, respectively. No single PE Films customer exceeds 10% of Tredegar's consolidated net sales. For additional information, see Item 1A. "Risk Factors" of this Form 10-K ("Item 1A").

Flexible Packaging Films

Flexible Packaging Films is comprised of Terphane Holdings LLC (“Terphane”). Flexible Packaging Films produces PET-based films for use in packaging applications that have specialized properties, such as heat resistance, strength, barrier protection and the ability to accept high-quality print graphics. These differentiated, high-value films are primarily manufactured in Brazil and sold in Latin America and the U.S. under the Terphane®, Sealphane® and Ecophane® brand names. Major end uses include food packaging and industrial applications. Flexible Packaging Films competes in all of its markets on the basis of product quality, service and price. In 2021, 2020 and 2019, Terphane accounted for approximately 18%, 18% and 17% of Tredegar’s consolidated net sales, respectively.

Raw Materials. The primary raw materials used by Flexible Packaging Films to produce polyester resins are purified terephthalic acid (“PTA”) and monoethylene glycol (“MEG”). Flexible Packaging Films also purchases additional polyester resins directly from suppliers. These raw materials are obtained from Brazilian and foreign suppliers at competitive prices. Terphane continues to monitor cost escalations to adjust selling prices as market dynamics permit and believes that there will be an adequate supply of polyester resins, PTA and MEG in the foreseeable future.

General

Intellectual Property. Tredegar considers patents, licenses and trademarks to be material to PE Films. On December 31, 2021, PE Films held 40 patents (including 5 U.S. patents), and 79 registered trademarks (including 4 U.S. registered trademarks). Flexible Packaging Films held 1 U.S. patent and 17 registered trademarks (including 4 U.S. registered trademarks). Aluminum Extrusions held no U.S. patents and 4 U.S. registered trademarks. As of December 31, 2021, these patents had remaining terms of 2.5 to 17.5 years.

Government Regulation. The Company’s operations are subject to various local, state, federal and foreign government regulations, including environmental, privacy and anti-corruption and anti-bribery laws and regulations.

U.S. laws concerning the environment to which the Company’s domestic operations are or may be subject to include the Clean Water Act, the Clean Air Act, the Resource Conservation and Recovery Act, the Occupational Safety and Health Act, the National Environmental Policy Act, the Toxic Substances Control Act, the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”), regulations promulgated under these acts, and other federal, state or local laws or regulations governing environmental matters. Compliance with these laws is an important consideration because Tredegar uses hazardous materials in some of its operations, is a generator of hazardous waste, and wastewater from the Company’s operations is discharged to various types of wastewater management systems. Under CERCLA and other laws, Tredegar may be subject to financial exposure for costs associated with waste management and disposal, even if the Company fully complies with applicable environmental laws.

The U.S. Environmental Protection Agency has adopted regulations under the Clean Air Act relating to emissions of carbon dioxide and other greenhouse gases (“GHG”), including mandatory reporting and permitting requirements. Several of the Company’s manufacturing operations result in emissions of carbon dioxide or GHG and are subject to the current GHG regulations. The Company’s compliance with environmental regulations has yet to require significant capital expenditures; however, environmental standards tend to become more stringent over time. Therefore, in order to comply with current or future environmental legislation or regulations, the Company may be subject to additional capital expenditures, operating expenses or other compliance costs, the amounts and timing of which are not presently determinable but which could be significant, including constructing new facilities or modifying existing facilities.

Like environmental regulations, current or future privacy and anti-corruption and anti-bribery legislation or regulations may subject the Company to additional capital expenditures, operating expenses or other compliance costs, the amounts and timing of which are not presently determinable but could be significant. Any failure to comply with current or future laws and regulations, including environmental, privacy and anti-corruption and anti-bribery laws and regulations, could subject Tredegar to substantial penalties, fines, costs and expenses. For further discussion regarding certain environmental, privacy and anti-corruption and anti-bribery laws and regulations to which the Company is subject, see Item 1A below.

Human Capital Management

Overview

Tredegar employed approximately 2,400 people at December 31, 2021 located in the U.S., Brazil, and Asia, of which 80% are located in the U.S. Approximately 15% of the Company’s employees are represented by labor unions located in the U.S. under various collective bargaining agreements with varying durations and expiration dates, none of which expire before 2025. All of Tredegar’s Brazilian employees are represented by a national labor union. Generally, the total number of employees of Tredegar does not significantly fluctuate throughout the year. However, acquisition or divestiture activity, or changes in the level of business activity may impact employee levels.

Health and Safety

Tredegar has continuously exceeded the industry standards for safety. The Company uses various forms of employee safety metrics to assess the health and safety performance of its Aluminum Extrusions, PE Films and Flexible Packaging operations, including employee safety data which is available on the Company's website at <https://tredegar.com/about-tredegar/committed-to-our-employees>. Tredegar has also instituted additional safety precautions during the ongoing COVID-19 pandemic as described in "The Impact of COVID-19" included in Item 7.

Additionally, Aluminum Extrusions has on-site health clinics at its Carthage and Clearfield facilities. These clinics allow Aluminum Extrusions to invest in its people, provide more personal and more thorough healthcare to employees, and enhance the employer-employee relationship. The Carthage and Clearfield clinics serve over 540 and 380 employees, respectively.

Talent and Development

The Company believes its employees are its most valuable asset and are critical to the success of the Company. The Company seeks to retain employees by offering competitive wages, benefits and training opportunities. To assess and monitor employee retention and engagement, the Company surveys employees and takes actions to address areas of employee concern. The annual employee engagement survey results are presented to Tredegar's Board of Directors ("Board"). Additionally, the objectives of our executive compensation programs are to attract, motivate and retain highly qualified executive officers. To accomplish these objectives, the Company relies on a pay strategy that emphasizes performance-based compensation through annual and long-term incentives. The Company believes that this pay strategy creates a strong link between pay and performance and aligns with our business strategy of generating strong operating results and shareholder value creation while controlling fixed costs.

The Company is committed to holistically supporting our employees both at work and in their communities by:

- Strictly following all applicable health, safety and non-discrimination laws in each country;
- Promoting the highest standards for employee health and safety through innovative programs; and
- Providing opportunities for community outreach and supporting programs that enhance the lives of children and families.

Inclusion and Diversity

Tredegar strictly complies with all applicable state, local and international laws governing nondiscrimination in employment in every location where Tredegar and its businesses have facilities to ensure healthy and positive working conditions. This applies to all terms and conditions of employment, including recruiting, hiring, job assignments, promotion, termination, layoff, recall, transfer, leaves of absence, compensation and training. All applicants and employees are treated with the same high level of respect regardless of their race, creed, color, religion, sex, sexual orientation, gender identity, age, pregnancy, national origin, ethnicity, political affiliation, union membership, marital status, citizenship status, veteran status, disability or other protected category. Employees who experience or witness discriminatory behavior are encouraged to report such behavior to their supervisor, Human Resources or Tredegar's toll-free anonymous reporting hotline. Additionally, the Company spends significant resources in developing its employees. Among the five core principles of the "The Tredegar Way" that the Company uses to guide its organization, the "Leadership" principle is focused on building a team of motivated and engaged leaders at every level of the Company. Each business unit has identified specific action plans to promote the Leadership principle among its employees. Action plans include talent development, skills training, reinforcement of strong cultural values, and robust systems to ensure a safe working environment.

Information About Our Executive Officers. See Item 10. "Directors, Executive Officers and Corporate Governance" of this Form 10-K.

Available Information and Corporate Governance Documents. Tredegar's website address is www.tredegar.com. The Company makes available, through its website, its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after such documents are electronically filed with, or furnished to, the Securities and Exchange Commission ("SEC"). Information filed electronically with the SEC can be accessed on its website at www.sec.gov. In addition, the Company's Corporate Governance Guidelines, Code of Conduct, the charters of the Audit, Executive Compensation, Nominating and Governance Committees and Climate Change Risk Assessment and many other corporate policies are available on Tredegar's website and are available in print to any shareholder upon request by contacting Tredegar's Corporate Secretary at 1100 Boulders Parkway, Richmond, Virginia 23225. The information on or that can be accessed through the Company's website is not, and shall not be deemed to be, a part of this Form 10-K or incorporated into other filings it makes with the SEC.

Item 1A. **RISK FACTORS**

There are a number of risks and uncertainties that could have a material adverse effect on the Company's consolidated financial condition, results of operations or cash flows. The following risk factors should be considered, in addition to the other information included in this Form 10-K, when evaluating Tredegar and its businesses.

Risks Related to all Tredegar Businesses

- ***Our results of operations, financial condition and cash flows could be adversely affected by pandemics, epidemics or other public health emergencies, such as coronavirus ("COVID-19") and emerging variants.*** Our business, results of operations, financial condition, and cash flows have been, and may continue to be, adversely affected by pandemics, epidemics or other public health emergencies, such as the global outbreak of COVID-19 and emerging variants. In March 2020, the World Health Organization characterized COVID-19 as a pandemic, and the President of the United States declared the COVID-19 outbreak a national emergency. The outbreak resulted in governments around the world implementing increasingly stringent measures to help control the spread of the virus, including quarantines, "shelter in place" and "stay at home" orders, travel restrictions, business curtailments, school closures, and other measures. However, there have been increases in COVID-19 cases in many areas caused by a combination of the potentially more contagious variants of the virus, as well as vaccine hesitancy and low vaccination rates in many areas of the U.S.

The extent to which the COVID-19 pandemic will ultimately impact our business, results of operations, financial condition and cash flows depends on future developments that are highly uncertain, rapidly evolving and difficult to predict at this time, including:

- the duration, spread and intensity of the pandemic;
- the availability, usage and effectiveness of vaccines, low vaccination rates in many areas of the U.S., and employee hesitancy to get vaccinated;
- increasing costs of labor, raw materials, and global transportation and logistics resources;
- a sustained labor shortage due to excessive absenteeism as a result of COVID-19 cases and/or exposures and increased turnover rates within our employee base impacting our ability to meet desired shipping levels;
- the ability of our suppliers, contractors and third-party logistics providers to meet their obligations to us (including supplying us with essential raw materials or shipping finished goods to our customers) on a timely basis and at previously anticipated costs without significant disruption, and our ability to identify alternative sources of materials and services, if necessary;
- our ability to continue to meet our customers' needs in the event of the suspension or interruption of essential elements of our manufacturing and supply arrangements and activities such as, the continued availability of raw materials, transportation, labor and production capacity at previously anticipated costs;
- the effect of the COVID-19 pandemic on our customers, including their ability to remain in operation and pay for the products purchased from us on a timely basis; and
- the impact of the COVID-19 pandemic on the financial and credit markets and economic activity generally, including our ability to maintain compliance with financial covenants, access lending, capital markets, and other sources of liquidity when needed on reasonable terms or at all.

While it is not possible at this time to estimate the impact that any particular epidemic, including COVID-19, could have on the Company's business, the extent of that impact would likely be affected by factors outside of our control such as the severity, duration and spread of such an epidemic, the measures taken by the governments of countries affected and the ability of our customers and consumers to access government programs providing liquidity and support during the crisis. The impact of an epidemic on our employees, our customers, our supply chains, demand for our products, our ability to supply customers, our operating costs and our other business activities, could adversely affect our financial condition, results of operations and cash flows. For more information on the effect of COVID-19 on our business and financial condition, refer to "***The Impact of COVID-19***" in Item 7.

- ***Tredegar's performance is influenced by costs incurred by its operating companies, including, for example, the cost of raw materials and energy.*** These costs include the cost of aluminum (the raw material on which Aluminum Extrusions primarily depends), resin (the raw material on which PE Films primarily depends), PTA and MEG (the raw materials on which Flexible Packaging Films primarily depends), natural gas (the principal fuel necessary for Aluminum Extrusions' plants to operate), electricity, diesel fuel and paint. Aluminum, resin and natural gas prices are volatile as shown in the charts in ***Quantitative and Qualitative Disclosures*** in Item 7. The Company continues to face inflationary pressures stemming from the COVID-19 operating environment, including notable increases in costs for raw materials, labor and freight. Additionally, geopolitical tensions, including deteriorating relations between the United States and Russia

resulting from the current situation involving Russia and Ukraine, could result in economic sanctions, tariffs, import-export restrictions and retaliatory actions that all have the potential to adversely impact the cost of raw materials and energy. The Company attempts to mitigate the effects of increased costs through price increases and contractual pass-through provisions, but there are no assurances that higher prices can effectively be passed through to customers or that Tredegar will be able to offset fully or on a timely basis the effects of higher raw material and energy costs through price increases or pass-through arrangements. Further, the Company's cost control efforts may not be sufficient to offset any increases in raw material, energy or other costs.

- **Material disruptions at one of the Company's major manufacturing facilities could negatively impact financial results.** Tredegar believes it has implemented measures to minimize the risks of disruption at its facilities. However, a disruption could occur as a result of any number of events: an equipment failure with repairs requiring long lead times, labor stoppages or shortages, cybersecurity attacks, utility disruptions, constraints on the supply or delivery of critical raw materials, and severe weather conditions, including potential flooding at the Aluminum Extrusions facility located in Carthage, TN. A material disruption in one of the Company's operating locations could negatively impact production and the Company's consolidated financial condition, results of operations and cash flows.
- **Tredegar has an underfunded defined benefit (pension) plan.** Tredegar sponsors a pension plan that covers certain hourly and salaried employees in the U.S. The plan was closed to new participants in 2007, and substantially frozen to benefit accruals for active participants in 2014. As of January 31, 2018, the plan no longer accrued benefits associated with crediting employees for service, thereby freezing all future benefits under the plan. On February 10, 2022, Tredegar announced the initiation of a process to terminate and settle its frozen defined benefit pension plan, which could take up to 24 months to complete. In connection therewith, on February 9, 2022, the Company borrowed funds under its revolving credit agreement to contribute \$50 million to the pension plan (the "Special Contribution") to reduce its underfunding and as part of a program within the pension plan to hedge or fix the expected future contributions that will be needed by the Company through the settlement process. As of December 31, 2021 (and before the Special Contribution), the plan was underfunded under U.S. generally accepted accounting principles ("GAAP") measures by \$69.5 million. The Company estimates that, with the Special Contribution, there will be no required minimum contributions to the pension plan until final settlement. The ultimate settlement benefit obligation may differ from the projected benefit obligation ("PBO") of \$314 million as of December 31, 2021, depending on market factors for buyers of pension obligations at the time of settlement. Additionally, factors that could cause actual future contributions by the Company to settle the pension plan to differ from expectations include, without limitation, the change in the values of pension plan assets and liabilities up through initiating hedging activities to fix underfunding amounts and assumptions thereafter relating to differences between the ultimate settlement benefit obligation and the PBO, census data, administrative costs, the effectiveness of hedging activities and discounts required to liquidate non-public securities held by the plan.
- **Noncompliance with any of the covenants in the Company's \$375 million revolving credit facility, as amended on December 1, 2020, which matures in June 2024, could result in all debt under the agreement outstanding at such time becoming due and limiting the Company's borrowing capacity, which could have a material adverse effect on its consolidated financial condition and liquidity.** The credit agreement governing Tredegar's revolving credit facility contains restrictions and financial covenants that, if violated, could restrict the Company's operational and financial flexibility. Failure to comply with these covenants could result in an event of default, which if not cured or waived, would result in all outstanding debt under the credit facility at such time becoming due, which could have a material adverse effect on the Company's consolidated financial condition and liquidity.
- **A failure in the Company's information technology systems as a result of cybersecurity attacks or other causes could negatively affect Tredegar's business.** The Company depends on information technology ("IT") to record and process customers' orders, manufacture and ship products in a timely manner, secure its production processes and know-how, maintain the financial accuracy of its business records and maintain personally identified information of its employees. An IT system failure due to computer viruses, internal or external security breaches, cybersecurity attacks or other malicious causes could disrupt our operations and prevent us from being able to process transactions with our customers, operate our manufacturing facilities and properly report transactions in a timely manner. Increased global IT security threats and cyber-crime pose a potential risk to the security and availability of the Company's IT systems, networks and services, including those that are managed, hosted, provided or used by third parties, as well as to the confidentiality, availability and integrity of the Company's data. Additionally, increased cybersecurity risk arises due to certain employees working remotely during the COVID-19 pandemic. To date, interruptions of the Company's IT systems have been infrequent and have not had a material impact on the Company's operations. A significant protracted failure of or security breach of the IT systems, networks or service providers the Company relies upon, or a loss or disclosure of business or other sensitive information, or personally identified information, as a result of a cybersecurity incident or other cause, could result in substantial costs to the Company, damage to the Company's reputation, regulatory enforcement actions and lawsuits and could adversely affect the Company's results of operations, financial condition or cash flows.

- **The Company has identified material weaknesses in its internal control over financial reporting. The Company's failure to establish and maintain effective internal control over financial reporting and to maintain effective disclosure controls and procedures increases the risk of a material misstatement in its consolidated financial statements, and its failure to meet its reporting and financial obligations, could, in turn, have a negative impact on its financial condition.** Maintaining effective internal control over financial reporting is an integral part of producing reliable financial statements. As discussed in Item 9A. "Controls and Procedures" of this Form 10-K ("Item 9A"), the Company's management concluded that the Company's internal control over financial reporting was not effective for the periods referred to therein as a result of certain deficiencies that were determined to constitute material weaknesses in the Company's internal control over financial reporting.

Under standards established by the Public Company Accounting Oversight Board, a material weakness is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis. Under the criteria set forth in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission, a material weakness in the design of monitoring controls indicates that the Company has not sufficiently developed and/or documented internal controls by which management can review and oversee the Company's financial information to detect and correct material errors or that the personnel responsible for performing the review did not have the sufficient skill set or knowledge of the subject matter to perform a proper assessment.

The Company is in the process of making certain changes in its internal control over financial reporting to remediate the material weaknesses as described in Item 9A. The implementation of the material aspects of this plan began in the second quarter of 2019 with the continuous significant assistance and support of a well-known outside consultant, and, while meaningful progress has been made, completion has been delayed by the COVID-19 pandemic, turnover in positions relevant to internal controls and the need for additional training. As the Company continues to evaluate and work to improve its internal control over financial reporting and disclosure controls and procedures, management may determine to take additional measures to address control deficiencies or modify the remediation plan. The Company cannot provide assurance, however, as to when it will remediate all such weaknesses, nor can it be certain of whether additional actions will be required or the costs of any such actions. Moreover, the Company cannot provide assurance that additional material weaknesses will not arise in the future.

See Item 9A for details regarding the numerous activities in the remediation plan that were completed through the fourth quarter of 2021 and the remaining activities that are scheduled for completion in the first half of 2022, in anticipation of conducting management's testing beginning in the first half of 2022. The material weaknesses cannot be considered remediated until the applicable controls have operated for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively.

The material weaknesses discussed in Item 9A did not result in material misstatements of the Company's financial statements as of and for the years ended December 31, 2021, 2020 and 2019 or in the intervening interim periods during those respective years. Any failure to remediate the material weaknesses, or the development of new material weaknesses in its internal control over financial reporting, could result in material misstatements in the Company's consolidated financial statements and cause it to fail to meet its reporting and financial obligations, which in turn could have a negative impact on its financial condition.

- **Tredegar is subject to current and future governmental regulation, including environmental laws and regulations, and could become exposed to material liabilities and costs associated with such regulation.** The Company is subject to regulation by local, state, federal and foreign governmental authorities. New laws and regulations, or changes to existing laws, including those relating to environmental matters (including global climate change and plastic products), and privacy matters, could subject Tredegar to significant additional capital expenditures, operating expenses or other compliance costs. Moreover, future developments in federal, state, local and international laws and regulations, including environmental laws, are difficult to predict. Environmental laws and privacy restrictions have become and are expected to continue to become increasingly strict. As a result, Tredegar expects to be subject to new environmental and privacy laws and regulations. However, any such changes are uncertain and, therefore, it is not possible for the Company to predict with certainty the amount of additional capital expenditures or operating expenses that could be necessary for compliance with respect to any such changes.

The Company is subject to the U.S. Foreign Corrupt Practices Act, Brazilian anti-corruption laws and similar anti-bribery laws in other jurisdictions, which generally prohibit companies and their intermediaries from making improper payments to foreign officials for the purpose of obtaining or retaining business. Although we have policies and procedures designed to facilitate compliance with these laws and regulations, our employees, contractors and agents may take actions in violation of our policies. Any such violation, even if prohibited by our policies, could adversely affect our business and/or our reputation. See **Government Regulation** in Item 1. "Business" of this Form 10-K for a further discussion of this risk factor.

- ***The transition away from the use of the London interbank offered rate ("LIBOR") settings as an interest rate benchmark may negatively impact our debt agreements and financial position, results of operations and liquidity.*** On March 5, 2021, the United Kingdom's Financial Conduct Authority published the dates that the use of LIBOR as an index for commercial loans will be phased out. Foreign currency indices, including the British pound, the Euro, and Swiss franc, along with the U.S. dollar 1-week and 2-month settings ceased after December 31, 2021. Also, after June 30, 2023, the remaining U.S. dollar settings will cease. Our most significant exposure to LIBOR relates to our revolving domestically held credit facility, which may be negatively impacted by renegotiated terms and costs of indebtedness associated with the latter of these transition dates. In addition, the overall financial markets may be disrupted as a result of the replacement of LIBOR, which could have an adverse effect on our cost of capital and our financial position. We continue to monitor the LIBOR transition and will work to minimize any impact.

Risks Related to Aluminum Extrusions

- ***Sales volume and profitability of Aluminum Extrusions is cyclical and seasonal and highly dependent on economic conditions of end-use markets in the U.S., particularly in the construction sector.*** Aluminum Extrusions' end-use markets can be cyclical and subject to seasonal swings in volume and have been adversely impacted during the COVID-19 pandemic. Because of the capital-intensive nature and level of fixed costs inherent in the aluminum extrusions business, the percentage drop in earnings before interest, taxes, depreciation and amortization ("EBITDA") from ongoing operations in a cyclical downturn will likely exceed the percentage drop in volume. In addition, during an economic slowdown, excess industry capacity often drives increased pricing pressure in many end-use markets as competitors seek to protect their position with key customers. Any benefits associated with cost reductions and productivity improvements may not be sufficient to offset the adverse effects on profitability from pricing and margin pressure and higher bad debts (including a greater chance of loss associated with customers defaulting on fixed-price forward sales contracts) that usually accompany a downturn. In addition, higher energy costs can reduce profits unless offset by price increases or cost reductions and productivity improvements.
- ***The failure to successfully implement the new enterprise resource planning and manufacturing execution systems could adversely impact the Aluminum Extrusions business and results of operations.*** On January 28, 2022, Aluminum Extrusions obtained approval from the Board to engage in the implementation project of a new enterprise resource planning and manufacturing execution systems ("ERP/MES") across all locations of the Aluminum Extrusions business. The ERP/MES project is expected to cost \$28 million over a two-year time span. The implementation of these systems is a major undertaking from a financial, management, and personnel perspective. The implementations may prove to be more difficult, costly, or time consuming than expected, and there can be no assurance that these systems will be beneficial to the extent anticipated. Any disruptions, delays or deficiencies in the design and implementation of the new systems could adversely affect our financial position, results of operations and cash flows; additionally, any disruptions, delays or deficiencies could adversely affect our remediation efforts with respect to the effectiveness of our internal controls over financial reporting.
- ***Failure to prevent competitors from evading anti-dumping and countervailing duties, or a reduction in such duties, could adversely impact Aluminum Extrusions.*** Chinese and other overseas manufacturers continue to try to evade the anti-dumping and countervailing orders to avoid duties. Effective April 25, 2017, the anti-dumping duty and countervailing duty orders on aluminum extrusions were extended for a period of five years. The orders will be reviewed again beginning in March 2022. A failure by, or the inability of, U.S. trade officials to curtail the evasion of these duties, or the potential reduction of applicable duties pursuant to annual administrative reviews of the orders by the Department of Commerce, could have a material adverse effect on the financial condition, results of operations and cash flows of Aluminum Extrusions.
- ***The duty-free importation of goods allowed under the United States-Mexico-Canada Agreement ("USMCA"), or other free trade agreements or duty-preference regimes, could result in lower demand for aluminum extrusions made in the U.S., which could materially and negatively affect Aluminum Extrusions' business and results of operations.*** In March 2018, the U.S. imposed tariffs of 10% on aluminum ingot and semi-finished aluminum imported into the U.S. from certain countries, including countries from which Aluminum Extrusions has historically sourced aluminum products. In September 2019, the U.S., Canada and Mexico entered into the USMCA. As a result of the 10% tariffs on aluminum ingot imported to the U.S. and the duty-free importation of goods allowed under USMCA or other trade agreement regimes or duty-preference programs, aluminum extrusions from outside the United States that are able to take advantage of duty-preference programs upon importation into the United States made in Canada and Mexico are free of the 10% tariff and can now be imported into and sold in the U.S. at very competitive prices. This could result in lower demand for aluminum extrusions made in the U.S., which could materially and negatively affect Aluminum Extrusions' business and results of operations.
- ***The markets for Aluminum Extrusions' products are highly competitive with product quality, service, delivery performance and price being the principal competitive factors.*** Aluminum Extrusions has approximately 1,370

customers that are in a variety of end-use markets within the broad categories of building and construction, distribution, automotive and other transportation, machinery and equipment, electrical and consumer durables. No single Aluminum Extrusions' customer exceeds 4% of consolidated net sales. Future success and prospects depend on Aluminum Extrusions' ability to provide superior service, high quality products, timely delivery and competitive pricing to retain existing customers and participate in overall industry cross-cycle growth. Failure in any of these areas could lead to a loss of customers, which could have an adverse material effect on the financial condition, results of operations and cash flows of Aluminum Extrusions.

Risks Related to PE Films

- ***PE Films is highly dependent on sales associated with relatively few large customers.*** PE Films' top four customers comprised approximately 13%, 16% and 14% of Tredegar's consolidated net sales in 2021, 2020 and 2019, respectively. The loss or significant reduction of sales associated with one or more of these customers without replacement by new business could have a material adverse effect on the Company.

The Company previously reported the risk that a portion of its film products used in surface protection applications would be made obsolete by customer product transitions to less costly alternative processes or materials. The Company estimates that these transitions, which principally relate to one customer, adversely impacted EBITDA from ongoing operations for PE Films by \$14.8 million during 2021 versus 2020. A further decline of \$7 million in EBITDA from ongoing operations due to the transitions is expected in 2022 versus 2021, at which time the transitions are expected to be complete.

The Surface Protection business is also experiencing competitive pricing pressures, unrelated to the customer product transitions, that are expected to adversely impact EBITDA from ongoing operations by approximately \$6 million in 2022 versus 2021. To offset the expected adverse impact of the customer transitions and pricing pressures, the Company is aggressively pursuing and making progress in generating contribution from sales of new surface protection products, applications and customers and driving production efficiencies and cost savings. Annual contribution to EBITDA from ongoing operations for PE Films from sales of products unrelated to previously disclosed customer product transitions increased \$7 million for the two-year period ended December 31, 2021, which excludes the impact of resin pass-through lag but includes the adverse impact of customer inventory corrections, customer production slowdowns associated with COVID-19-related factors, and a slowdown in the television market in the fourth quarter of 2021.

While PE Films is undertaking efforts to expand its customer base, there can be no assurance that such efforts will be successful, or that they will offset any loss of sales and profits associated with customer transitions and other large customer declines.

- ***Failure of PE Films' customers, who are subject to cyclical downturns, to achieve success or maintain market share could adversely impact PE Films' sales and operating margins.*** PE Films' plastic films are used in the production of various consumer products sold worldwide. A customer's ability to successfully develop, manufacture and market those products is integral to PE Films' success. Cyclical downturns and changing consumer preferences may negatively affect businesses that use PE Films' plastic film products, which could adversely affect sales and operating margins. Other factors that could adversely affect the business include (i) failure by a key customer to achieve success or maintain share in markets in which they sell products containing PE Films' materials, including as a result of customer preferences for products other than plastics, (ii) key customers using products developed by others that replace PE Films' business with such customers, (iii) delays in a key customer rolling out products utilizing new technologies developed by PE Films, and (iv) operational decisions by a key customer that result in component substitution, inventory reductions and similar changes.
- ***The Company's inability to protect its intellectual property rights or its infringement of the intellectual property rights of others could have a material adverse impact on PE Films.*** The continued success of the PE Films' business depends on its ability not only to protect its own technologies and trade secrets, but also to develop and sell new products that do not infringe upon existing patents. Intellectual property litigation is very costly and could result in substantial expense and diversions of Company resources, both of which could adversely affect its consolidated financial condition, results of operations and cash flows. In addition, there may be no effective legal recourse against infringement of the Company's intellectual property by third parties, whether due to limitations on enforcement of rights in foreign jurisdictions or as a result of other factors.
- ***Disruptions to PE Films' supply chain could have a material adverse impact on PE Films.*** Certain raw materials used in manufacturing PE Films' products are sourced from single suppliers, and PE Films may not be able to quickly or inexpensively re-source from other suppliers. The risk of damage or disruption to its supply chain may increase if and when different suppliers consolidate their product portfolios, experience financial distress or disruption of manufacturing operations (such as, for example, the impact of hurricanes on petrochemical production). Failure to take adequate steps to effectively manage such events, which are intensified when a product is procured from a single supplier or location, could

adversely affect PE Films' consolidated financial condition, results of operations and cash flows, and also require additional resources to restore its supply chain.

- ***Rising trade tensions could cause an increase in the cost of PE Films' products or otherwise negatively impact the Company.*** A portion of PE Film's business involves imports to and from the U.S. and other countries where the Company produces and sells its products. Trade tensions have been rising between the U.S. and other countries, particularly China. An increase in tariffs and other trade barriers between the U.S. and China, or between the U.S. and other countries, could cause an increase in the cost of PE Films' products or otherwise negatively impact the production and sale of the Company's products in world markets.

Risks Related to Flexible Packaging Films

- ***A history of uncertain economic conditions in Brazil could adversely impact the financial condition, results of operations and cash flows of Flexible Packaging Films.*** For flexible packaging films produced in Brazil, selling prices and key raw material costs are principally determined in U.S. Dollars and are impacted by local economic conditions and local and global competitive dynamics. Flexible Packaging Films is exposed to foreign exchange translation risk (its functional currency is the Brazilian Real) because almost 90% of the sales of Flexible Packaging Films business unit in Brazil ("Terphane Ltda.") and substantially all of its related raw material costs are quoted or priced in U.S. Dollars while its variable conversion, fixed conversion and sales, general and administrative costs before depreciation & amortization (collectively "Terphane Ltda. Operating Costs") are quoted or priced in Brazilian Real. This mismatch, together with a variety of economic variables impacting currency exchange rates, causes volatility that could negatively or positively impact EBITDA from ongoing operations for Flexible Packaging Films. While Flexible Packaging Films hedges this exposure on a short-term basis with foreign exchange forward rate contracts, the exposure continues to exist beyond the hedging periods.
- ***Overcapacity in Latin American polyester film production and governmental failure to extend anti-dumping duties in Brazil on imported products or prevent competitors from circumventing such duties could adversely impact Flexible Packaging Films.*** In recent years, excess global capacity in the industry has led to increased competitive pressures from imports into Brazil. The Company believes that these conditions have shifted the competitive environment from a regional to a global landscape and have driven price convergence and lower product margins for Flexible Packaging Films. Favorable anti-dumping rulings or countervailing duties are in effect for products imported from China, Egypt, India, Mexico, United Arab Emirates, Turkey, Peru and Bahrain. Competitors not currently subject to anti-dumping duties may choose to utilize their excess capacity by selling product in Brazil, which may result in pricing pressures that Flexible Packaging Films may not be able to offset with cost savings measures and/or manufacturing efficiency initiatives. In May 2021, the Brazilian authorities concluded the sunset review relating to the anti-dumping process for polyester film imported from China, India and Egypt, and decided to extend duties for another five years. However, due to its doubts that films would continue to be imported from China and Egypt, the government immediately suspended the implementation of the tariffs for those countries. If in the future there are volumes imported from China or Egypt which are harming the Brazilian market, authorities may promptly reinstate tariffs. For India, the Brazilian authorities also reviewed measures against countervailing duties and extended those for five years as well. Considering the expiration date for anti-dumping rulings against Mexico, United Arab Emirates and Turkey in first quarter 2023, Terphane may request a sunset review in the fourth quarter of 2022, if there are indications of continuous dumping practices from those sources into the Brazilian market.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

Item 2. PROPERTIES

General

Most of the improved real property and the other assets used in the Company's operations are owned. Certain of the owned property is subject to an encumbrance under the Company's credit agreement (see Note 7 "Debt and Credit Agreements" to the Consolidated Financial Statements in Item 15 for more information).

Tredegear considers the manufacturing facilities, warehouses and other properties and assets that it owns or leases to be in generally good condition. Capacity utilization at its various manufacturing facilities can vary with product mix and normal fluctuations in sales levels. The Company believes that its Bonnell Aluminum, PE Films and Flexible Packaging Films manufacturing facilities have sufficient capacity to meet current production requirements. Tredegear's corporate headquarters, which is leased, is located at 1100 Boulders Parkway, Richmond, Virginia 23225.

The Company's principal manufacturing plants and facilities as of December 31, 2021 are listed below:

Aluminum Extrusions

<u>Locations in the U.S.</u>	<u>Locations Outside the U.S.</u>	<u>Principal Operations</u>
Carthage, Tennessee Clearfield, Utah (leased) Elkhart, Indiana Newnan, Georgia Niles, Michigan	None	Production of aluminum extrusions, fabrication and finishing

PE Films

<u>Locations in the U.S.</u>	<u>Locations Outside the U.S.</u>	<u>Principal Operations</u>
Pottsville, Pennsylvania Richmond, Virginia (technical center) (leased)	Guangzhou, China	Production of plastic films

Flexible Packaging Films

<u>Locations in the U.S.</u>	<u>Locations Outside the U.S.</u>	<u>Principal Operations</u>
Bloomfield, New York (technical center and production facility)	Cabo de Santo Agostinho, Brazil	Production of PET-based films

Item 3. LEGAL PROCEEDINGS

The information required by this Item 3 is set forth in Note 18 "Contingencies" to the Consolidated Financial Statements in Item 15 and is hereby incorporated herein by reference.

Item 4. MINE SAFETY DISCLOSURES

None.

PART II

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

Tredegar's common stock is traded on the New York Stock Exchange ("NYSE") under the ticker symbol "TG". There were 33,743,617 shares of common stock held by 1,677 shareholders of record on March 4, 2022.

Dividend Information

Tredegar has paid a regular cash dividend every quarter since becoming a public company in July 1989 and expects that comparable regular cash dividends will continue to be paid in the future. In addition, Tredegar has paid special cash dividends from time to time. On December 1, 2020, the Board declared a special dividend of \$200 million, or \$5.97 per share, on the Company's common stock (the "Special Dividend"). The Special Dividend was paid in December 2020.

All decisions with respect to the declaration and payment of future dividends will be made by the Board in its sole discretion based upon earnings, financial condition, anticipated cash needs, restrictions in the Company's revolving credit facility and other such considerations as the Board deems relevant. See Note 7 "Debt and Credit Agreements" to the Consolidated Financial Statements in Item 15 for the restrictions on the payment of dividends contained in the Company's credit agreement related to aggregate dividends permitted.

Issuer Purchases of Equity Securities

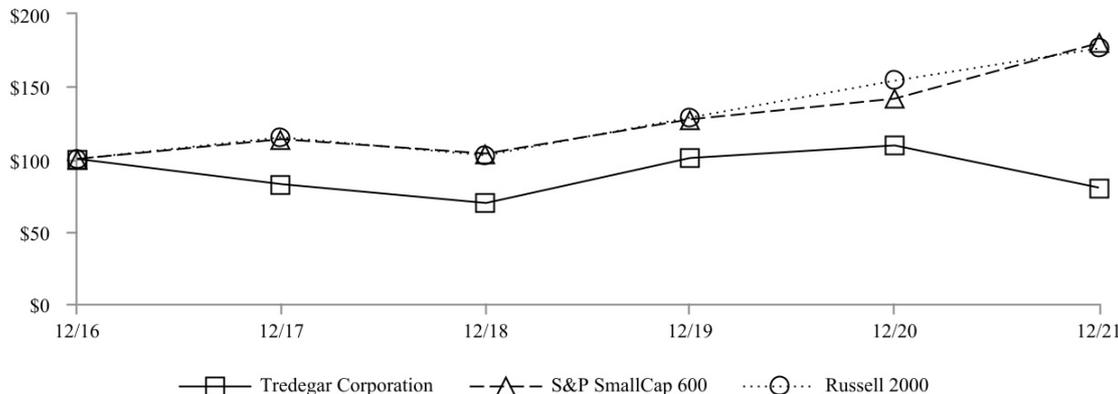
On January 7, 2008, Tredegar announced that the Board approved a share repurchase program whereby management is authorized at its discretion to purchase, in the open market or in privately negotiated transactions, up to 5 million shares of the Company's outstanding common stock. The authorization has no time limit. Tredegar did not repurchase any shares in the open market or otherwise in 2021, 2020 or 2019 under this standing authorization. The maximum number of shares remaining under this standing authorization was 1,732,003 at December 31, 2021.

Stock Performance Graph

The following graph compares cumulative total shareholder returns for Tredegar, the S&P SmallCap 600 Stock Index (an index comprised of companies with market capitalizations similar to Tredegar) and the Russell 2000 Index for the five years ended December 31, 2021. Tredegar is part of both the S&P SmallCap 600 Index and Russell 2000 Index.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Tredegar Corporation, the S&P SmallCap 600 Index, and the Russell 2000 Index



*\$100 invested on 12/31/15 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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Item 6. [RESERVED]

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 focuses on and is intended to clarify the results of our operations, certain changes in our financial position, liquidity, capital structure and business developments for the periods covered by the consolidated financial statements included in this Form 10-K. This discussion should be read in conjunction with, and is qualified by reference to, the other related information including, but not limited to, the audited consolidated financial statements (including the notes thereto) and the description of our business, all as set forth in this Form 10-K, as well as the risk factors discussed above in Item 1A.

This section provides discussion and a year-to-year comparison for the years ended December 31, 2021 and 2020. Discussion regarding our results of operations for the year ended December 31, 2019 and a year-to-year comparison between the years ended December 31, 2020 and 2019 can be found in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2020.

Executive Summary

General

Tredegar Corporation is an industrial manufacturer with three primary businesses: custom aluminum extrusions for the North American building & construction, automotive and specialty end-use markets through its Aluminum Extrusions segment; surface protection films for high-technology applications in the global electronics industry through its PE Films segment; and specialized polyester films primarily for the Latin American flexible packaging market through its Flexible Packaging Films segment. With approximately 2,400 employees, the Company operates manufacturing facilities in North America, South America, and Asia.

On October 30, 2020, the Company completed the sale of Personal Care Films. The transaction excluded the packaging film lines and related operations located at Pottsville Packaging, which are now being reported within the Surface Protection component of PE Films. Commencing in the third quarter of 2020, all historical results for Personal Care Films have been presented as discontinued operations. For more information on these transactions, see Note 17 to the Consolidated Financial Statements in Item 15.

Sales were \$826.5 million in 2021 compared to \$755.3 million in 2020. Net income from continuing operations was \$57.9 million (\$1.72 per diluted share) in 2021, compared with net loss from continuing operations of \$16.8 million (\$0.51 per diluted share) in 2020.

The 2021 results include:

- An after-tax gain of \$10.0 million (\$0.30 per diluted share) on the sale of the Company's investment in kaléo on December 27, 2021 resulting in total cash proceeds of \$47.1 million (see Note 9 to the Consolidated Financial Statements in Item 15 for more details).

The 2020 results include:

- An after-tax loss on the Company's investment in kaléo of \$47.6 million (\$1.42 per diluted share), which was accounted for under the fair value method (see Note 9 to the Consolidated Financial Statements in Item 15 for more details); and
- An impairment of the total goodwill balance of Aluminum Extrusions' reporting unit acquired in the AACOA acquisition in 2012 was recorded in the after-tax amount of \$10.5 million (\$0.32 per diluted share).

Other losses related to asset impairments and costs associated with exit and disposal activities for continuing operations were not material for the years ended December 31, 2021 and 2020, respectively. Losses associated with plant shutdowns, asset impairments, restructurings and other items are described in Results of Operations. EBITDA from ongoing operations is the measure of profit and loss used by Tredegar's chief operating decision maker ("CODM") for purposes of assessing financial performance. The Company uses net sales from continuing operations as its measure of revenues from external customers at the segment level. This measure is separately included in the financial information regularly provided to the CODM.

Earnings before interest and taxes ("EBIT") from ongoing operations is a non-GAAP financial measure included in the reconciliation of segment financial information to consolidated results for the Company. It is not intended to represent the stand-alone results for Tredegar's ongoing operations under GAAP and should not be considered as an alternative to net income as defined by GAAP. We believe EBIT is a widely understood and utilized metric that is meaningful to certain investors and that including this financial metric in the reconciliation of management's performance metric, EBITDA from ongoing operations, provides useful information to those investors that primarily utilize EBIT to analyze the Company's core operations.

See the table in Note 13 to the Consolidated Financial Statements in Item 15 for a reconciliation of this non-GAAP measure to GAAP.

THE IMPACT OF COVID-19 AND RELATED FINANCIAL CONSIDERATIONS

Essential Business and Employee Considerations

The Company's priorities during the COVID-19 pandemic continue to be to protect the health and safety of employees while keeping its manufacturing sites open due to the essential nature of many of its products. The Company has continued to manufacture the full range of products at its facilities.

The Company's protocols to protect the health and well-being of its employees from COVID-19 continue to evolve as the Centers for Disease Control, the Office of the Surgeon General and other state and local health departments learn more about the virus and its variants. Consistent with recommendations and mandates from government agencies and health authorities, the Company has implemented multiple layers of COVID-19 protections and interventions.

The Company has engaged in an education campaign that provides employees with the most accurate and up-to-date information related to COVID-19 vaccines and has offered different monetary and/or time-away-from-work incentives to encourage employees to get vaccinated with the primary dose(s) and to get a booster shot once eligible. The Company will continue to monitor available information to assess safeguards that may be taken to try to prevent a COVID-19 outbreak in the workplace.

Aluminum Extrusions, also known as Bonnell Aluminum, continues to experience higher than normal absenteeism and hiring difficulties, which it attributes to COVID-19-related factors, including high COVID-19 transmission rates in the geographic areas where its plants are located. While the average number of direct labor employees at Bonnell Aluminum facilities increased approximately 9% in the fourth quarter of 2021, compared with the abnormally low levels related to the pandemic in the second and third quarters of 2020, there continues to be a shortage of labor to meet existing demand and desired shipment levels. Moreover, onboarding new employees has resulted in higher hiring and training costs and labor inefficiencies in 2021 versus last year.

All three of the Company's business segments are managing through supply chain disruptions and escalating costs, including raw material cost increases, shortages, transportation cost increases and delays. To offset growing cost pressures, Bonnell Aluminum implemented a selling price increase effective January 3, 2022, which followed two price increases in 2021. In response to unprecedented cost increases and supply issues for polyethylene and polypropylene resin, PE Films implemented a quarterly resin cost pass-through mechanism, effective July 1, 2021, for all products and customers not previously covered by such arrangements. Flexible Packaging Films, which is also known as Terphane, which is headquartered in Brazil, continues to monitor cost escalations to adjust selling prices as market dynamics permit.

Financial Considerations

Approximately 58% of Bonnell Aluminum's sales volume in 2021 was related to building and construction ("B&C") markets (non-residential B&C of 51% and residential B&C of 7%). Non-residential B&C volume started to decline in the fourth quarter of 2020 after the fulfillment of contracts that existed at the start of the COVID-19 pandemic. Market demand in this sector has recently been strong but not fully realized in Bonnell Aluminum's fourth quarter and full year 2021 results due to pandemic-related labor shortages and resulting production inefficiencies. Non-residential B&C volume declined 4% versus the fourth quarter of 2020 and 11% versus full year 2020. However, current bookings and backlog remain at record high levels which the Company believes will bode well for future results when production constraints are alleviated.

The Surface Protection component of PE Films had record EBITDA from ongoing operations in 2020 but experienced a decline in volume in 2021, primarily related to a previously disclosed customer product transition unrelated to the pandemic. In addition, the lag in the pass-through of significant pandemic-related increases in resin costs, and some of such cost increases incurred prior to mid-year that will not be recovered even on a lagging basis, have adversely impacted PE Films' profitability in 2021.

At Terphane, the Company believes that the pandemic-related surge in demand for flexible packaging films that began in early 2020 returned to lower pre-pandemic levels during the second quarter of 2021.

OPERATIONS REVIEW

Segment Analysis. A summary of results for 2021 versus 2020 for each of the Company's reporting segments is shown below.

Aluminum Extrusions

A summary of results for Aluminum Extrusions is provided below:

(In thousands, except percentages)	Year Ended December 31,		Favorable/ (Unfavorable)
	2021	2020	% Change
Sales volume (lbs)	183,367	186,391	(1.6)%
Net sales	\$ 539,325	\$ 455,711	18.3 %
Ongoing operations:			
EBITDA	\$ 55,948	\$ 55,137	1.5 %
Depreciation & amortization	(16,272)	(17,403)	6.5 %
EBIT	\$ 39,676	\$ 37,734	5.1 %
Capital expenditures	\$ 18,914	\$ 10,260	

Net sales in 2021 increased by 18.3% versus 2020. The annual increase in net sales was primarily due to an increase in average selling prices to cover significantly higher aluminum raw material costs and higher operating costs, partially offset by lower sales volume. Sales volume in 2021 decreased by 1.6% versus 2020. Increased shipments in the specialty sector were offset by declines in B&C and automotive markets. All end markets served within the specialty sector experienced growth. The Company believes that declines in the non-residential B&C market resulted mainly from COVID-19-related labor shortages, with a portion of the decline in automotive sales volume associated with supply chain issues in the automotive industry.

EBITDA from ongoing operations in 2021 increased by \$0.8 million versus 2020 due to higher pricing (\$13.6 million net of the pass-through of aluminum raw materials costs), partially offset by higher labor and employee-related costs (\$7.2 million) and other inflationary operating costs such as higher supply expenses (\$6.4 million), lower labor productivity (\$1.6 million), higher freight expenses (\$3.2 million) and higher selling, general and administrative costs (\$3.2 million). In addition, the timing of the flow through under the first-in first-out method of aluminum raw material costs passed through to customers, previously acquired at lower prices in a quickly rising commodity pricing environment, resulted in a benefit of \$6.9 million in 2021 versus a charge of \$1.3 million in 2020.

Projected Capital Expenditures and Depreciation & Amortization

Capital expenditures are projected to be \$30 million in 2022, including \$15 million for new ERP/MES, \$6 million for infrastructure upgrades at the facilities located in Niles, Michigan, Carthage, Tennessee and Newnan, Georgia, and \$3 million for other strategic projects. The ERP/MES project is expected to cost \$28 million over a two-year time span. In addition to strategic projects, approximately \$6 million will be required to support continuity of current operations. Depreciation expense is projected to be \$14 million in 2022. Amortization expense is projected to be \$3 million in 2022.

PE Films

A summary of results for PE Films is provided below:

(In thousands, except percentages)	Year Ended December 31,		Favorable/ (Unfavorable)
	2021	2020	% Change
Sales volume (lbs)	39,429	45,175	(12.7)%
Net sales	\$ 118,920	\$ 139,288	(14.6)%
Ongoing operations:			
EBITDA	\$ 27,694	\$ 45,107	(38.6)%
Depreciation & amortization	(6,263)	(6,762)	7.4 %
EBIT	\$ 21,431	\$ 38,345	(44.1)%
Capital expenditures	\$ 2,997	\$ 6,024	

Net sales in 2021 decreased by \$20.4 million versus 2020, primarily due to lower volume and unfavorable mix associated with the previously disclosed customer product transitions in Surface Protection, partially offset by higher pricing associated with the pass-through of increased resin costs.

EBITDA from ongoing operations in 2021 decreased by \$17.4 million versus 2020 primarily due to:

- A \$19.4 million decrease from Surface Protection primarily related to lower sales and unfavorable mix associated with the customer product transitions (\$14.8 million), lower sales and unfavorable mix for products unrelated to customer product transitions (\$3.4 million), margin erosion associated with higher resin costs that occurred before the resin index pricing plan was fully implemented (\$1.4 million), the pass-through lag associated with higher resin costs (\$1.4 million), and higher freight expense (\$1.0 million), partially offset by production efficiencies and cost savings (\$1.9 million) and lower research and development spend (\$0.4 million);
- A \$0.1 million increase from Pottsville Packaging; and
- A \$2.7 million favorable variance associated with the divestiture of Bright View Technologies at the end of 2020.

Customer Product Transitions and Other Factors in Surface Protection

The Surface Protection component of PE Films supports manufacturers of optical and other specialty substrates used in flat panel display products. These films are primarily used by customers to protect components of displays in the manufacturing and transportation processes and then discarded.

The Company previously reported the risk that a portion of its film products used in surface protection applications would be made obsolete by customer product transitions to less costly alternative processes or materials. The Company estimates that these transitions, which principally relate to one customer, adversely impacted EBITDA from ongoing operations for PE Films by \$14.8 million during 2021 versus 2020. A further decline of \$7 million in EBITDA from ongoing operations due to the transitions is expected in 2022 versus 2021, at which time the transitions are expected to be complete.

The Surface Protection business is also experiencing competitive pricing pressures, unrelated to the customer product transitions, that are expected to adversely impact EBITDA from ongoing operations by approximately \$6 million in 2022 versus 2021. To offset the expected adverse impact of the customer transitions and pricing pressures, the Company is aggressively pursuing and making progress in generating contribution from sales of new surface protection products, applications and customers and driving production efficiencies and cost savings. Annual contribution to EBITDA from ongoing operations for PE Films from sales of products unrelated to previously disclosed customer product transitions increased \$7 million for the two-year period ended December 31, 2021, which excludes the impact of resin pass-through lag but includes the adverse impact of customer inventory corrections, customer production slowdowns associated with COVID-19-related factors, and a slowdown in the television market in the fourth quarter of 2021.

Projected Capital Expenditures and Depreciation & Amortization

Capital expenditures are projected to be \$5 million in 2022, including: \$3 million for productivity projects and \$2 million for capital expenditures required to support continuity of current operations. Depreciation expense is projected to be \$7 million in 2022. There is no amortization expense for PE Films.

Flexible Packaging Films

A summary of results for Flexible Packaging Films is provided below:

(In thousands, except percentages)	Year Ended December 31,		Favorable/ (Unfavorable) % Change
	2021	2020	
Sales volume (lbs)	104,569	113,115	(7.6)%
Net sales	\$ 139,978	\$ 134,605	4.0 %
Ongoing operations:			
EBITDA	\$ 31,684	\$ 30,645	3.4 %
Depreciation & amortization	(1,988)	(1,761)	(12.9)%
EBIT	\$ 29,696	\$ 28,884	2.8 %
Capital expenditures	\$ 5,603	\$ 4,959	

Sales volume declined by 7.6% in 2021 versus 2020, primarily due to lower demand, resin supply issues, and an equipment failure impacting production. Net sales in 2021 increased 4.0% compared to 2020, primarily due to higher selling prices from the pass-through of higher resin costs and favorable product mix, partially offset by lower sales volume.

EBITDA from ongoing operations in 2021 increased by \$1.0 million versus 2020 primarily due to:

- Higher selling prices from the pass-through of higher resin costs (\$11.2 million), favorable product mix (\$2.0 million) and lower selling, general, and administration expenses (\$0.7 million), partially offset by higher raw material costs (\$12.8 million), lower sales volume (\$4.9 million) and higher variable costs (\$1.7 million);
- Net favorable currency translation of Real-denominated operating costs (\$5.9 million);
- Higher foreign currency transaction gains (\$1.2 million) in 2021 versus 2020; and
- Lower value-added tax credits received in 2021 (\$0.5 million) versus 2020.

Projected Capital Expenditures and Depreciation & Amortization

Capital expenditures are projected to be \$8 million in 2022, including \$4 million for new capacity for value-added products and productivity projects and \$4 million for capital expenditures required to support continuity of current operations. Depreciation expense is projected to be \$2 million in 2022. Amortization expense is projected to be \$0.4 million in 2022.

Corporate Expenses, Interest and Income Taxes

Corporate expenses, net, decreased \$1.1 million in 2021 versus 2020, primarily due to higher transition service fees, net of corporate costs associated with the 2020 divestiture of the Personal Care Films business (\$1.1 million).

Interest expense increased to \$3.4 million in 2021 from \$2.6 million in 2020, primarily due to higher average debt levels.

The effective tax rate used to compute income taxes for continuing operations in 2021 was 13.8% compared to 32.8% in 2020. The differences between the U.S. federal statutory rate and the effective tax rate for 2021 and 2020 are shown in Note 12 to the Consolidated Financial Statements in Item 15.

Pension expense was \$14.1 million in 2021, a favorable change of \$0.5 million from 2020. The impact on earnings from pension expense is reflected in “Corporate expenses, net” in the net sales and operating profit by segment statements in Note 13 to the Consolidated Financial Statements in Item 15. On February 10, 2022, Tredegar announced the initiation of a process to terminate and settle its frozen defined benefit pension plan, which could take up to 24 months to complete. In connection therewith, the Company borrowed funds under its revolving credit agreement and made a \$50 million Special Contribution to reduce its underfunding and as part of a program within the pension plan to hedge or fix the expected future contributions that will be needed by the Company through the settlement process. The Company expects to realize income tax benefits on the Special Contribution of approximately \$11 million. Administrative costs for the pension plan through the settlement process are estimated at \$4 to \$5 million.

As of December 31, 2021 (and before the Special Contribution), the estimated pension plan underfunding under GAAP was \$69 million, comprised of investments at fair value of \$245 million and a projected benefit obligation (“PBO”) of \$314 million. The ultimate settlement benefit obligation may differ from the PBO, depending on market factors for buyers of pension obligations at the time of settlement. Pension expense is projected to be approximately \$14 million under GAAP in 2022 and zero for calculating earnings before interest, taxes, depreciation and amortization as defined in the Company’s revolving credit agreement (“Credit EBITDA”), which is used to compute certain borrowing ratios. The Company estimates that, with the Special Contribution, there will be no required minimum contributions to the pension plan until final settlement.

Total debt was \$73.0 million at December 31, 2021, compared to \$134.0 million at December 31, 2020. Net debt (debt in excess of cash and cash equivalents), a non-GAAP financial measure, was \$42.5 million at December 31, 2021, compared to \$122.2 million at December 31, 2020. The year-over-year decline in net debt of \$79.7 million includes proceeds of \$47.1 million from the sale of the Company’s investment in kaleo, Inc (“kaléo”), on December 27, 2021. The Company’s revolving credit agreement allows borrowings of up to \$375 million and matures in June 2024. The Company believes that its most restrictive covenant (computed quarterly) is the leverage ratio, which permits maximum borrowings of up to 4x Credit EBITDA. The Company had Credit EBITDA and a leverage ratio (calculated in the “*Liquidity and Capital Resources*” below) of \$90.0 million and 0.81x, respectively, at December 31, 2021.

Net capitalization and other credit measures are provided in *Liquidity and Capital Resources*, below.

Forward-looking and Cautionary Statements

Some of the information contained in this Form 10-K may constitute “forward-looking statements” within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. When using the words “believe,” “estimate,” “anticipate,” “expect,” “project,” “plan,” “likely,” “may” and similar expressions, Tredegar does so to identify forward-looking statements. Such statements are based on Tredegar’s then current expectations and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those addressed in the forward-looking statements. It is possible that Tredegar’s actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in or implied by these forward-looking statements. In addition, the Company’s current projections for its businesses could be materially affected by the highly uncertain impact of the COVID-19 pandemic. As a consequence, the Company’s results could differ significantly from its projections, depending on, among other

things, the ultimate impact of the pandemic on employees, supply chains, customers and the U.S. and world economies. Accordingly, you should not place undue reliance on these forward-looking statements. For risks and important factors that could cause actual results to differ from expectations, refer to the reports that Tredegar files with or furnishes the SEC from time-to-time, including the risks and important factors set forth in Item 1A. Readers are urged to review and consider carefully the disclosures Tredegar makes in the reports Tredegar files with or furnishes to the SEC. Tredegar does not undertake, and expressly disclaims any duty, to update any forward-looking statement to reflect any change in management's expectations or any change in conditions, assumptions or circumstances on which such statements are based, except as required by applicable law.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with GAAP requires the Company to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. Certain accounting policies, as described below, are considered "critical accounting policies" because they are particularly dependent on estimates made by management about matters that are inherently uncertain and could have a material impact on the Company's consolidated financial statements. Estimates and judgments are based on historical experience, forecasted events and various other assumptions that management believes are reasonable under the circumstances. Actual results could differ significantly from those estimates under different assumptions and conditions. A summary of all of our significant accounting policies is included in Note 1 to the Consolidated Financial Statements in Item 15.

Impairment of Goodwill

The Company assesses goodwill for impairment when events or circumstances indicate that the carrying value may not be recoverable, or, at a minimum, on an annual basis (December 1st of each year). When assessing goodwill for impairment, accounting guidance allows the Company to first perform a qualitative assessment about the likelihood of the carrying value of a reporting unit exceeding its fair value, referred to as the Step 0 assessment. The Step 0 assessment requires the evaluation of certain qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors and overall financial performance, as well as company and reporting unit factors. If the Company's Step 0 analysis indicates that it is more likely than not that the fair value of a reporting unit is less than the carrying amount, then the Company would perform a quantitative impairment test.

As of December 1, 2021, the Company's reporting units with goodwill were Surface Protection in PE Films and Futura in Aluminum Extrusions. Both of these reporting units have separately identifiable operating net assets (operating assets including goodwill and identifiable intangible assets net of operating liabilities). In addition, 2021 the Company applied the Step 0 goodwill assessment to Surface Protection and Futura; both had fair values significantly in excess of their carrying amounts when last tested using the quantitative impairment test. The Company's Step 0 analyses in 2021 of these reporting units concluded that it is not more likely than not that the fair values of each reporting unit was less than its carrying amount. Therefore, the quantitative goodwill impairment tests for these reporting units were not necessary in 2021. The Surface Protection and Futura reporting units had goodwill in the amounts of \$57.3 million and \$13.3 million, respectively, at December 31, 2021.

Pension Benefits

Tredegar sponsors noncontributory defined benefit (pension) plans that have resulted in varying amounts of net pension income or expense, as developed from actuarial valuations. Inherent in these valuations are key assumptions including discount rates and the expected return on plan assets. The Company is required to consider current market conditions, including changes in interest rates and plan asset investment returns, in determining these assumptions. Actuarial assumptions may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants. These differences may result in a significant impact to the amount of net pension income or expense recorded in future periods.

The discount rate is used to determine the present value of future payments. The discount rate is the single rate that, when applied to expected benefit payments, provides a present value equal to the present value of expected benefit payments determined by using the AA-rated bond yield curve. In general, the pension liability increases as the discount rate decreases and vice versa. The weighted average discount rate utilized was 2.90%, 2.57% and 3.27% at the end of 2021, 2020 and 2019, respectively, with changes between periods due to changes in market interest rates. Pay for active participants of the plan was frozen as of December 31, 2007. As of January 31, 2018, the plan no longer accrued benefits associated with crediting employees for service, thereby freezing all future benefits under the plan. On February 10, 2022, Tredegar announced the initiation of a process to terminate and settle its frozen defined benefit pension plan, which could take up to 24 months to complete. As the settlement process occurs, the Company expects to recognize a non-cash reclassification adjustment to net income or loss of other comprehensive net actuarial losses associated with the pension plan currently reflected directly in shareholders' equity. Other comprehensive net actuarial losses associated with the pension plan were approximately \$109 million on a pretax basis as of December 31, 2021.

A lower expected return on plan assets increases the amount of expense and vice versa. Decreases in the level of actual plan assets will also serve to increase the amount of pension expense. The total return on plan assets (net of fees and plan expenses), which is primarily affected by the change in fair value of plan assets, current year contributions and current year payments to participants, was approximately 10.4% in 2021, 10.9% in 2020 and 11.8% in 2019. The expected long-term rate return of 3.05%, 5.00% and 6.00% in 2021, 2020 and 2019 was developed through consultation with the Company's investment advisors. Several factors were considered, including prevailing and planned strategic asset allocations, current and expected future market conditions, inflation-adjusted historical returns, volatilities, risk premiums and managed asset premiums. The Company anticipates that its expected long-term return on plan assets will be 3.05% for 2022. See Note 8 to the Consolidated Financial Statements in Item 15 for more information on expected long-term return on plan assets and asset mix.

See the *Executive Summary* section above for further discussion regarding the financial impact of the Company's pension plans.

Income Taxes

Current tax liabilities and assets are recognized for the estimated taxes payable or refundable, respectively, on the tax returns for the current year. Deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. Accordingly, accounting for income taxes represents the Company's best estimate of various events and transactions. Tax laws are often complex and may be subject to differing interpretations by the taxpayer and the relevant governmental taxing authorities. In establishing a provision for income tax expense, Tredegar must make judgments and interpretations about the application of tax laws. The Company must also make estimates about when in the future certain items will affect taxable income in the various taxing jurisdictions.

A valuation allowance is recorded in the period when the Company determines that it is more likely than not that all or a portion of deferred income tax assets may not be realized. The establishment and removal of a valuation allowance requires the Company to consider all positive and negative evidence and make a judgmental decision regarding the amount of valuation allowance required as of a reporting date.

Tredegar may be required to change its provision for income taxes when estimates used in determining valuation allowances on deferred tax assets significantly change, or when new information indicates the need for adjustment in valuation allowances. Additionally, future events, such as changes in tax laws, tax regulations, or interpretations of such laws or regulations, could have an impact on the provision for income tax and the effective tax rate. Any such changes could significantly affect the amounts reported in the financial statements in the year these changes occur.

See Note 12 to the Consolidated Financial Statements in Item 15 for additional information on income taxes.

Results of Operations

2021 versus 2020

Revenues. Sales in 2021 increased by 9.4% compared with 2020. Net sales increased 18.3% in Aluminum Extrusions primarily due to an increase in average selling prices to cover significantly higher aluminum raw material costs and higher operating costs, partially offset by lower sales volume. Net sales decreased 14.6% in PE Films primarily due to lower volume and unfavorable mix associated with the previously disclosed customer product transitions in Surface Protection, partially offset by higher pricing associated with the pass-through of increased resin costs. Net sales increased in Flexible Packaging Films by 4.0% primarily due to higher selling prices from the pass-through of higher resin costs and favorable product mix, partially offset by lower sales volume. For more information on changes in net sales and volume, see the *Executive Summary* section above.

Operating Costs and Expenses. Consolidated gross profit (sales minus cost of goods sold and freight) as a percentage of sales (gross profit margin) was 18.0% in 2021 versus 22.6% in 2020. The gross profit margin in Aluminum Extrusions decreased primarily due to higher labor and employee-related costs and other inflationary operating costs such as higher supply expenses, partially offset by higher pricing. The gross profit margin in PE Films decreased primarily due to Surface Protection lower sales and unfavorable mix associated with the customer product transitions, lower sales and unfavorable mix for products unrelated to customer product transitions, and margin erosion associated with higher resin costs that occurred before the resin index pricing plan was fully implemented. The gross profit margin in Flexible Packaging Films decreased due to lower sales volume and higher raw material costs, partially offset by favorable product mix and higher selling prices from the pass-through of higher resin costs. For more information on changes in operating costs and expenses, see the *Executive Summary* section above.

Selling, General and Administrative. As a percentage of sales, selling, general and administrative ("SG&A") and R&D expenses were 9.8% in 2021 compared with 12.3% in 2020. SG&A and R&D expenses were down year-over-year, while net sales increased. Decreased spending is primarily due to non-recurring corporate costs associated with the divested Personal

Care Films business, lower R&D spending in PE Films, lower stock-based compensation, and nonrecurring SG&A expenses related to the Bright View Technologies divestiture at the end of 2020.

Plant shutdowns, asset impairments, restructurings and other. Pre-tax losses associated with plant shutdowns, asset impairments, restructurings and other items for continuing operations in 2021 detailed below are shown in the statements of net sales and EBITDA from ongoing operations by segment table in Note 13 to the Consolidated Financial Statements in Item 15 and are included in “Asset impairments and costs associated with exit and disposal activities, net of adjustments” in the consolidated statements of income, unless otherwise noted. A discussion of unrealized gains and losses on investments can also be found in Note 16 to the Financial Statements in Item 15 and additional information on restructuring costs can be found in Note 17 to the Consolidated Financial Statements in Item 15.

(\$ in millions)	Q1	Q2	Q3	Q4	2021
Aluminum Extrusions:					
(Gains) losses from sale of assets, investment writedowns and other items:					
Consulting expenses for ERP feasibility study ¹	\$ —	\$ —	\$ —	\$ 0.3	\$ 0.3
Futura intangible amortization out-of-period adjustment ⁶	—	—	—	(0.9)	(0.9)
Vacation accrual policy change ⁵	—	—	—	(2.9)	(2.9)
Environmental charges at Newnan, Georgia plant ³	—	—	0.1	0.1	0.2
COVID-19-related expenses, net of relief ²	(0.2)	0.3	0.1	(0.1)	0.1
Total for Aluminum Extrusions	\$ (0.2)	\$ 0.3	\$ 0.2	\$ (3.5)	\$ (3.2)
PE Films:					
(Gains) losses associated with plant shutdowns, asset impairments and restructurings:					
Other restructuring costs - severance	\$ —	\$ —	\$ 0.1	\$ 0.3	\$ 0.4
(Gains) losses from sale of assets, investment writedowns and other items:					
Vacation accrual policy change ⁵	—	—	—	(0.5)	(0.5)
COVID-19-related expenses ²	0.2	0.1	0.1	0.1	0.5
Total for PE Films	\$ 0.2	\$ 0.1	\$ 0.2	\$ (0.1)	\$ 0.4
Flexible Packaging Films:					
(Gains) losses from sale of assets, investment writedowns and other items:					
One-time tax credit in Brazil for unemployment/social security insurance non-income taxes resulting from a favorable decision by Brazil's Supreme Court regarding the calculation of such taxes ^{2,4}	\$ —	\$ (8.5)	\$ —	\$ —	\$ (8.5)
COVID-19-related expenses ²	—	—	—	0.1	0.1
Total for Flexible Packaging Films	\$ —	\$ (8.5)	\$ —	\$ 0.1	\$ (8.4)
Corporate:					
(Gains) losses associated with plant shutdowns, asset impairments and restructurings:					
Costs, net of gain associated with the sale of the Lake Zurich manufacturing facility assets	\$ 0.2	\$ 0.2	\$ (0.2)	\$ (0.1)	\$ 0.1
Other restructuring costs - severance	—	—	—	0.2	0.2
(Gains) losses from sale of assets, investment writedowns and other items:					
Professional fees associated with business development activities and other ²	0.8	0.8	0.7	1.6	3.9
Professional fees associated with internal control over financial reporting ²	0.2	0.9	0.8	1.2	3.1
Write-down of investment in Harbinger Capital Partners Special Situations Fund ²	0.1	0.4	—	—	0.5
Stock compensation expense associated with the fair value remeasurement of awards granted at the time of the 2020 Special Dividend ¹	0.4	0.1	(0.1)	—	0.4
Transition service fees, net of corporate costs associated with the divested Personal Care Films business ²	(0.3)	(0.3)	0.1	0.2	(0.3)
Vacation accrual policy change ⁵	—	—	—	(0.4)	(0.4)
Total for Corporate	\$ 1.4	\$ 2.1	\$ 1.3	\$ 2.7	\$ 7.5

1. Included in "Selling, general and administrative expenses" in the consolidated statements of income.

2. Included in "Other income (expense), net" in the consolidated statements of income.

3. Included in "Costs of goods sold" in the consolidated statements of income.

4. For more information, see Note 9 to the consolidated financial statements in Item 15.

5. For more information, see Note 6 to the consolidated financial statements in Item 15.

6. Included in "Amortization of identifiable intangibles" in the consolidated statements of income.

Interest Expense. Interest expense, which is net of amounts capitalized and included in property, plant and equipment (\$0.1 million and \$0.1 million capitalized in 2021 and 2020, respectively), was \$3.4 million in 2021, compared to \$2.6 million for 2020. Average debt outstanding and interest rates were as follows:

(In millions, except percentages)	2021	2020
Floating-rate debt with interest charged on a rollover basis at one-month LIBOR plus a credit spread:		
Average outstanding debt balance	\$ 128.8	\$ 33.5
Average interest rate	1.8 %	2.3 %

Liquidity and Capital Resources

The Company continuously focuses on working capital management. Measures such as days sales outstanding (“DSO”), days inventory outstanding (“DIO”) and days payables outstanding (“DPO”) are used to evaluate changes in working capital. Changes in operating assets and liabilities from continuing operations from December 31, 2020 to December 31, 2021 are summarized below. Cash flows for discontinued operations have not been separately disclosed in the consolidated statements of cash flows.

- Accounts and other receivables increased \$17.0 million or 19.7%.
 - Accounts and other receivables in Aluminum Extrusions increased by \$17.1 million primarily due to an increase in average selling prices to cover significantly higher aluminum raw material costs and higher operating costs, partially offset by lower sales volume and improved collection efforts in 2021. DSO (computed using trailing 12 months net sales and a rolling 12-month average of accounts and other receivables balances) was approximately 47.6 days in 2021 and 47.5 days in 2020.
 - Accounts and other receivables in PE Films decreased by \$0.6 million primarily due to lower volume and unfavorable mix associated with the previously disclosed customer product transitions in Surface Protection, partially offset by higher pricing associated with the pass-through of increased resin costs. DSO was approximately 28.5 days in 2021 and 30.2 days in 2020.
 - Accounts and other receivables in Flexible Packaging Films increased by \$1.3 million primarily due to higher selling prices from the pass-through of higher resin costs and favorable product mix, partially offset by lower sales volume. DSO was approximately 40.0 days in 2021 and 41.0 days in 2020.
- Inventories increased \$22.1 million or 33.3%.
 - Inventories in Aluminum Extrusions increased by \$17.4 million primarily due to higher average aluminum prices and COVID-19-related operational and production inefficiencies. DIO (computed using trailing 12 months costs of goods sold calculated on a first in, first out basis and a rolling 12-month average of inventory balances calculated on the first-in, first-out basis) was approximately 41.4 days in 2021 and 39.3 days in 2020.
 - Inventories in PE Films decreased by \$2.1 million primarily due to lower planned raw material levels as a result of lower sales volume in 2021 compared to 2020. DIO was approximately 62.8 days in 2021 and 59.2 days in 2020.
 - Inventories in Flexible Packaging Films increased by \$6.8 million primarily related to higher average resin prices, higher finished good levels due to lower than anticipated sales demand and higher planned raw material levels due to resin supply issues. DIO was approximately 93.1 days in 2021 and 89.4 days in 2020.
- Net property, plant and equipment increased by \$3.8 million (2.3%) primarily due to capital expenditures of \$27.8 million, partially offset by depreciation expense of \$22.1 million and a reduction from the effect of changes in foreign exchange rates of \$0.8 million.
- Goodwill and identifiable intangible assets, net decreased by \$1.8 million (2.0%) primarily due to amortization expense.
- Accounts payable increased by \$34.1 million or 38.0%.
 - Accounts payable in Aluminum Extrusions increased by \$23.7 million, primarily due to higher average aluminum prices and favorable payment terms with certain vendors. DPO (computed using trailing 12 months costs of goods sold calculated on a first in, first out basis and a rolling 12-month average of accounts payable balances) was approximately 60.1 days in 2021 and 53.1 days in 2020.
 - Accounts payable in PE Films increased by \$4.4 million primarily due to higher resin costs related to raw material purchases in 2021. DPO was approximately 44.0 days in 2021 and 36.8 days in 2020.
 - Accounts payable in Flexible Packaging Films increased by \$6.7 million, primarily due to higher resin costs related to raw material purchases in 2021 and favorable payment terms with certain vendors. DPO was approximately 68.2 days in 2021 and 61.7 days in 2020.

Net cash provided by operating activities was \$70.6 million in 2021 compared to \$74.4 million in 2020. The decrease was primarily due to higher net working capital (\$13.8 million), partially offset by lower pension and postretirement benefit plan contributions (\$7.0 million) and lower operating lease payments (\$1.1 million) in 2021 compared to 2020.

Net cash provided by investing activities was \$24.5 million in 2021 compared to \$32.9 million in 2020. The decrease was primarily due to higher capital expenditure spending of \$4.0 million in 2021 and cash proceeds from the sale of Personal Care Films (\$55.1 million) and Bright View Technologies (\$1.1 million) in 2020, partially offset by cash proceeds received in 2021 in connection with the sale of the Company's investment in kaléo (\$47.1 million) and the sale of the Lake Zurich manufacturing facility assets (\$4.7 million).

Net cash used in financing activities was \$76.8 million in 2021 compared to \$125.6 million in 2020. The decrease was primarily due to a special dividend of \$200 million paid to shareholders in 2020, partially offset by higher net borrowings (\$153.0 million) in 2020 under the Credit Agreement (as defined below).

The Company believes that existing borrowing availability, current cash balances and cash flow from operations will be sufficient to satisfy short term material cash requirements related to working capital, capital expenditure, debt repayments and dividend requirements for at least the next twelve months. In the longer term, liquidity will depend on many factors, including results of operations, the timing and extent of capital expenditures, changes in operating plans, or other events that would cause the Company to seek additional financing in future periods.

At December 31, 2021, Tredegar had cash and cash equivalents of \$30.5 million, including funds held in locations outside the U.S. of \$16.4 million.

Tredegar has a five-year secured revolving credit agreement (the "Credit Agreement") providing for aggregate borrowings in an amount of \$375 million, which matures in June 2024.

Net capitalization and indebtedness as defined under the Credit Agreement as of December 31, 2021 were as follows:

Net Capitalization and Indebtedness as of December 31, 2021	
(In thousands)	
Net capitalization:	
Cash and cash equivalents	\$ 30,521
Debt:	
Credit Agreement	73,000
Debt, net of cash and cash equivalents	42,479
Shareholders' equity	184,722
Net capitalization	\$ 227,201
Indebtedness as defined in Credit Agreement:	
Total debt	\$ 73,000
Indebtedness	\$ 73,000

The credit spread and commitment fees charged on the unused amount under the Credit Agreement at various indebtedness-to-Credit EBITDA levels are as follows:

Pricing Under Credit Agreement (Basis Points)		
Indebtedness-to-Credit EBITDA Ratio	Credit Spread Over LIBOR	Commitment Fee
> 3.5x but ≤ 4.0x	200.0	40
> 3.0x but ≤ 3.5x	187.5	35
> 2.0x but ≤ 3.0x	175.0	30
> 1.0x but ≤ 2.0x	162.5	25
≤ 1.0x	150.0	20

At December 31, 2021, the interest rate on debt under the Credit Agreement existing at that date was priced at one-month LIBOR plus the applicable credit spread of 150.0 basis points.

The most restrictive covenants in the Credit Agreement include:

- Maximum indebtedness-to-Credit EBITDA ("Leverage Ratio") of 4.00x;
- Minimum Credit EBITDA-to-interest expense of 3.00x; and

- Maximum aggregate distributions to shareholders over the remaining term of the Credit Agreement of \$75 million; provided, that if the Leverage Ratio of equal to or greater than 3.00x, a limitation on such payments for the succeeding quarter at the greater of (i) \$4.75 million and (ii) 50% of consolidated net income for the most recent fiscal quarter.

The Credit Agreement is secured by substantially all of the Company's and its domestic subsidiaries' assets, including equity in certain material first-tier foreign subsidiaries. At December 31, 2021, based upon the most restrictive covenant within the Credit Agreement, available credit under the Credit Agreement was approximately \$287 million. Total debt outstanding was \$73 million and \$134 million as of December 31, 2021 and 2020, respectively.

The computations of Credit EBITDA, the leverage ratio and interest coverage ratio as defined in the Credit Agreement are presented below along with the related most restrictive covenants. Credit EBITDA as defined in the Credit Agreement is not intended to represent net income or cash flow from operations as defined by GAAP and should not be considered as either an alternative to net income or to cash flow.

Computations of Credit EBITDA, Leverage Ratio and Interest Coverage Ratio as Defined in the Credit Agreement Along with Related Most Restrictive Covenants

As of and for the Twelve Months Ended December 31, 2021 (In thousands)

Computations of Credit EBITDA as defined in Credit Agreement for the twelve months ended December 31, 2021	
Net income (loss)	\$ 57,826
Plus:	
After-tax losses related to discontinued operations	111
Total income tax expense for continuing operations	9,284
Interest expense	3,386
Depreciation and amortization expense for continuing operations	23,784
All non-cash losses and expenses, plus cash losses and expenses not to exceed \$10,000, for continuing operations that are classified as unusual, extraordinary or which are related to plant shutdowns, asset impairments and/or restructurings (cash-related of \$8,999)	9,553
Charges related to stock option grants and awards accounted for under the fair value-based method	2,495
Losses related to the application of the equity method of accounting	—
Losses related to adjustments in the estimated fair value of assets accounted for under the fair value method of accounting	—
Minus:	
After-tax income related to discontinued operations	—
Total income tax benefits for continuing operations	—
Interest income	(73)
All non-cash gains and income, plus cash gains and income in excess of \$10,000, for continuing operations that are classified as unusual, extraordinary or which are related to plant shutdowns, asset impairments and/or restructurings	(3,859)
Income related to changes in estimates for stock option grants and awards accounted for under the fair value-based method	—
Income related to the application of the equity method of accounting	—
Income related to adjustments in the estimated fair value of assets accounted for under the fair value method of accounting	(12,780)
Plus cash dividends declared on investments in an amount not to exceed \$10,000 for such period	318
Plus or minus, as applicable, pro forma EBITDA adjustments associated with acquisitions and asset dispositions	—
Plus or minus, as applicable, pro forma EBITDA adjustments to pension expense associated with the early payment of pension obligations	—
Credit EBITDA as defined in Credit Agreement	\$ 90,045
Computations of leverage and interest coverage ratios as defined in Credit Agreement at December 31, 2021:	
Leverage ratio (indebtedness-to-Credit EBITDA)	0.81x
Interest coverage ratio (Credit EBITDA-to-interest expense)	26.59x
Most restrictive covenants as defined in Credit Agreement:	
Available balance of maximum permitted aggregate amount of dividends that can be paid by Tredegar during the remaining term of the Credit Agreement (\$75,000 minus \$20,187 of dividends paid after December 1, 2020)	\$ 54,813
Maximum leverage ratio permitted	4.00x
Minimum interest coverage ratio permitted	3.00x

Tredegar was in compliance with all of its debt covenants as of December 31, 2021. Noncompliance with any of the debt covenants may have a material adverse effect on its financial condition or liquidity, in the event such noncompliance cannot be cured or should the Company be unable to obtain a waiver from the lenders. Renegotiation of the covenant through an amendment to the Credit Agreement may effectively cure the noncompliance, but may have an effect on its financial condition or liquidity depending upon how the covenant is renegotiated.

Material Cash Requirements for Known Contractual and Other Obligations

The Company's material cash requirements from known contractual and other obligations as of December 31, 2021 were as follows:

Long-term debt and interest payments

As of December 31, 2021, the Company had outstanding debt of \$73.0 million with contractual payments due in June 2024. Estimated future interest payments associated with outstanding debt total \$3.2 million, with \$1.3 million payable within the next 12 months.

Pension and other postretirement obligations

On February 10, 2022, Tredegar announced the initiation of a process to terminate and settle its frozen defined benefit pension plan, which could take up to 24 months to complete. In connection therewith, on February 9, 2022, the Company borrowed funds under its revolving credit agreement and contributed a \$50 million Special Contribution to the pension plan to reduce its underfunding and as part of a program within the pension plan to hedge or fix the expected future contributions that will be needed by the Company through the settlement process. The Company estimates that, with the Special Contribution, there will be no required minimum contributions to the pension plan until final settlement. Tredegar has determined that it is not practicable to estimate additional cash requirements beyond 2022 as the ultimate settlement of the benefit obligation may differ from the projected benefit obligation of \$314 million as of December 31, 2021.

In addition to providing pension benefits, the Company provides postretirement life insurance and health care benefits for certain groups of employees. As of December 31, 2021, the aggregate benefit obligation for the Company's other post retirement plans was \$7.4 million, of which the Company expects to pay \$0.5 million in the next 12 months.

Capital expenditure commitments

See "Projected Capital Expenditures and Depreciation & Amortization" within "Operations Overview" above in this Item 7 for discussion of the Company's planned investment in capital expenditures in 2022, a portion of which represents contractual commitments that existed as of December 31, 2021.

Operating Leases

The Company enters into various operating leases primarily for real estate, office equipment and vehicles. See Note 4 to the consolidated financial statements for additional information.

Uncertain Tax Positions

As of December 31, 2021, unrecognized tax benefits on uncertain tax positions were \$0.6 million. Tax payments resulting from the successful challenge by the taxing authority on uncertain tax positions taken by Tredegar would possibly result in the payment of estimated interest and penalties of \$0.1 million if tax payments were made as a result of a successful challenge by the taxing authority on uncertain tax positions. Due to uncertainties in the timing of potential tax audits, the timing of the resolution of these positions is uncertain. Therefore, the Company is unable to make a reasonably reliable estimate of the timing of payments beyond 12 months. See Note 12 to the Consolidated Financial Statements in Item 15 for additional information.

Off-Balance Sheet Arrangements

The Company has no material off-balance sheet arrangements that have had or are reasonably likely to have a material current or future effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

From time to time, the Company enters into transactions with third parties in connection with the sale of assets or businesses in which it agrees to indemnify the buyers or third parties involved in the transaction, or the sellers or third parties involved in the transaction agree to indemnify Tredegar, for certain liabilities or risks related to the assets or business. Also, in the ordinary course of business, the Company may enter into agreements with third parties for the sale of goods or services that may contain indemnification provisions. In the event that an indemnification claim is asserted, liability for indemnification would be subject to an assessment of the underlying facts and circumstances under the terms of the applicable agreement. Further, any indemnification payments may be limited or barred by a monetary cap, a time limitation, or a deductible or basket. For these reasons, the Company is unable to estimate the maximum potential amount of the potential future liability under the indemnity provisions of these agreements. Tredegar does, however, accrue for losses for any known contingent liability, including those that may arise from indemnification provisions, when future payment is probable and the amount is reasonably estimable. The Company discloses contingent liabilities if the probability of loss is reasonably possible and material.

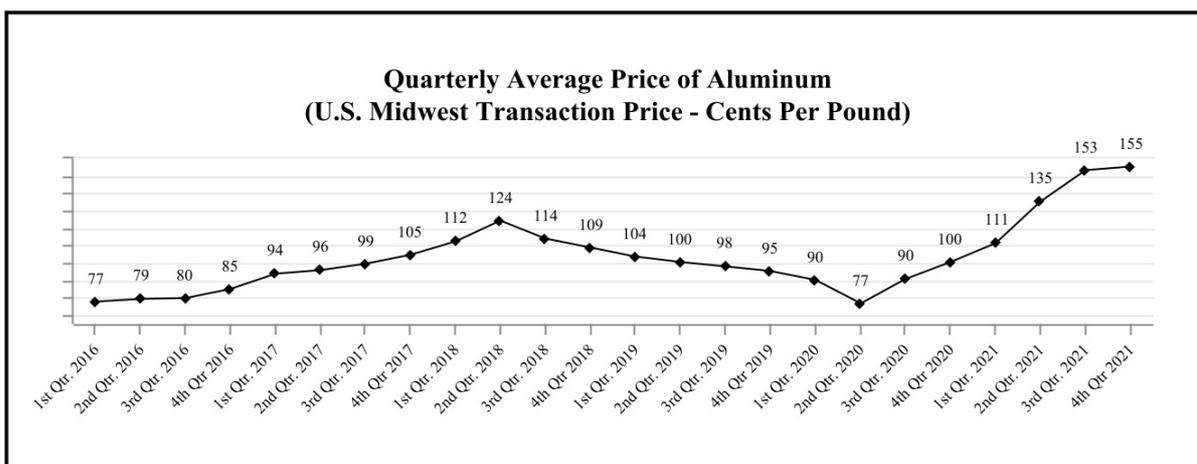
Quantitative and Qualitative Disclosures about Market Risk

Tredegar has exposure to the volatility of interest rates, polyethylene and polypropylene resin prices, PTA and MEG prices, aluminum ingot and scrap prices, energy prices, foreign currencies and emerging markets. See **Liquidity and Capital Resources** regarding interest rate exposures related to borrowings under the Credit Agreement.

Profit margins in Aluminum Extrusions are sensitive to fluctuations in aluminum ingot and scrap prices as well as natural gas prices (natural gas is the principal energy source used to operate its casting furnaces). Changes in polyethylene resin prices and the timing of those changes could have a significant impact on profit margins in PE Films. Changes in polyester resin, PTA and MEG prices, and the timing of those changes, could have a significant impact on profit margins in Flexible Packaging Films. There is no assurance of the Company’s ability to pass through higher raw material and energy costs to its customers.

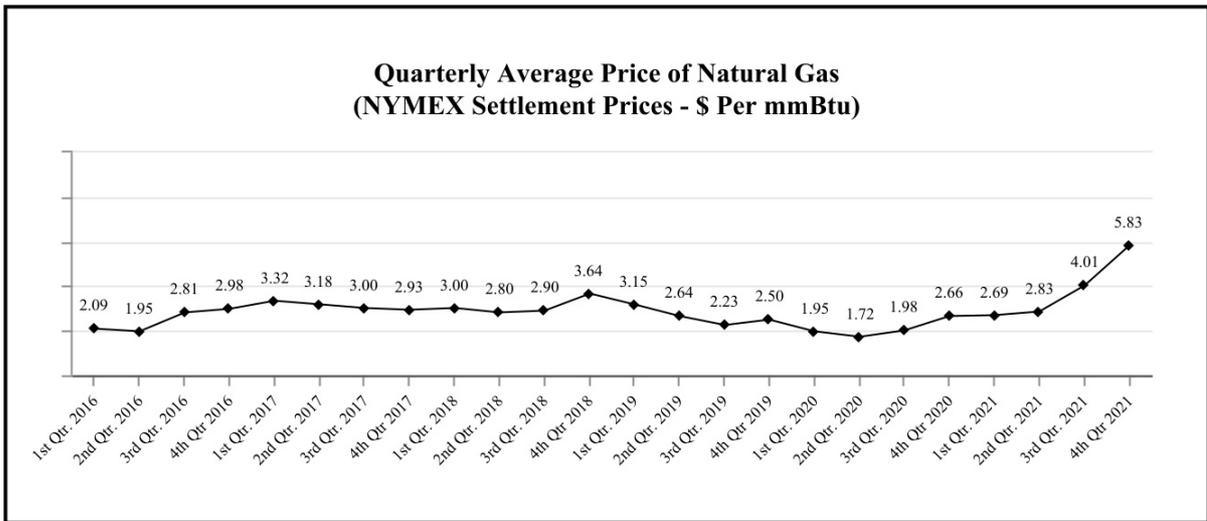
In the normal course of business, Aluminum Extrusions enters into fixed-price forward sales contracts with certain customers for the sale of fixed quantities of aluminum extrusions at scheduled intervals. In order to hedge its exposure to aluminum price volatility (see the chart below) under these fixed-price arrangements, which generally have a duration of not more than 12 months, the Company enters into a combination of forward purchase commitments and futures contracts to acquire or hedge aluminum, based on the scheduled deliveries. See Note 10 to the Consolidated Financial Statements in Item 15 for additional information.

The volatility of quarterly average aluminum prices is shown in the chart below.



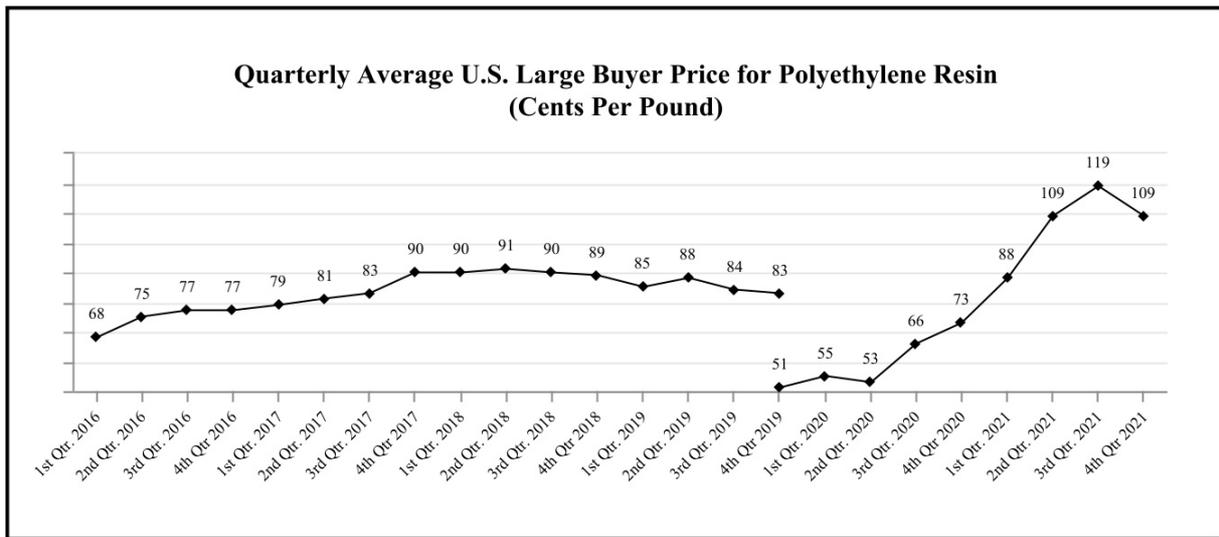
Source: Quarterly averages computed by the Company using daily Midwest average prices provided by Platts.

The volatility of quarterly average natural gas prices is shown in the chart below.



Source: Quarterly averages computed by Tredegar using monthly NYMEX settlement prices.

The volatility of average quarterly prices of polyethylene resin in the U.S. (a primary raw material for PE Films products) is shown in the chart below:

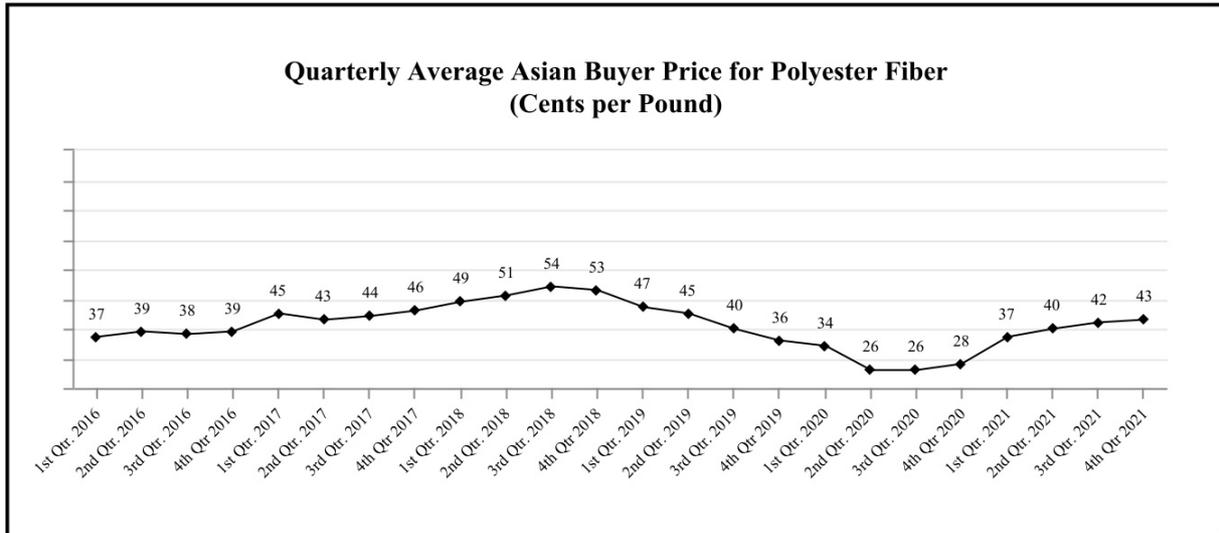


Source: Quarterly averages computed by Tredegar using monthly data provided by IHS, Inc. In February 2020, IHS reflected a 32 cents per pound non-market adjustment based on their estimate of the growth of discounts in prior periods. The 4th quarter 2019 average rate of \$0.51 per pound is shown on a pro forma basis as if the non-market adjustment was made in the fourth quarter of 2019.

The price of resin is driven by several factors, including supply and demand and the price of oil, ethylene and natural gas. Selling prices to customers are set considering numerous factors, including the expected volatility of resin prices. In certain situations, PE Films has index-based pass-through raw material cost arrangements with customers. However, under certain agreements, changes in resin prices are not passed through for a period of 90 days or more. In response to unprecedented cost increases and supply issues for polyethylene and polypropylene resin, Tredegar Surface Protection implemented a quarterly resin cost pass-through mechanism, effective July 1, 2021, for all products and customers not previously covered by such arrangements. Pricing on the remainder of the business is based upon raw material costs and supply/demand dynamics within the markets that the Company competes.

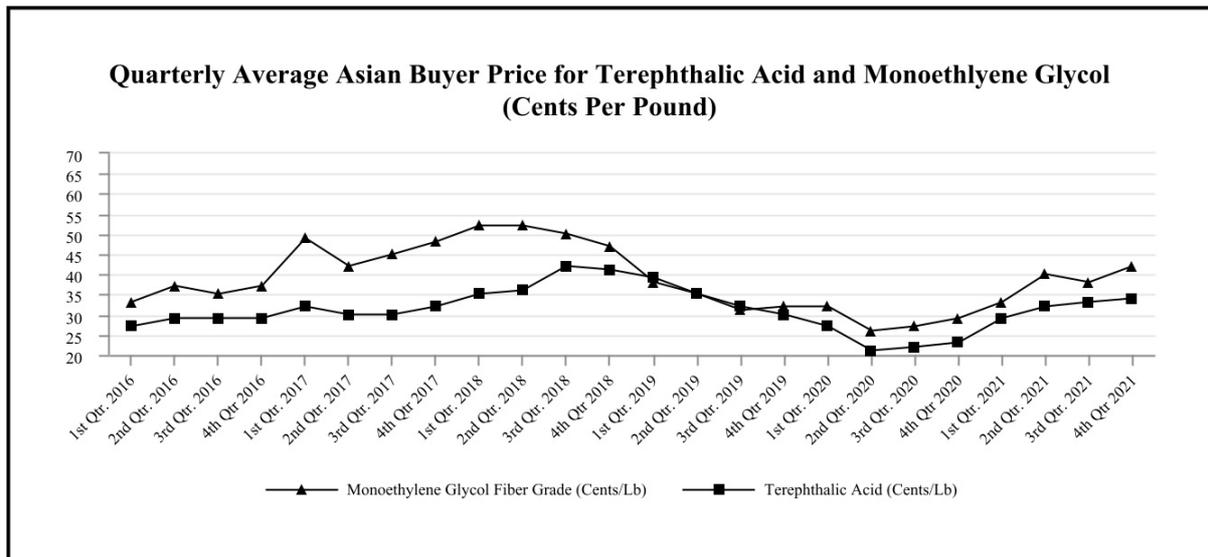
Polyester resins, MEG and PTA used in flexible packaging films produced in Brazil are primarily purchased domestically, with other sources available mostly from Asia and the U.S. Given the nature of these products as commodities, pricing is

derived from Asian pricing indexes. The volatility of the average quarterly prices for polyester fibers in Asia, which is representative of polyester resin (a primary raw material for Flexible Packaging Films) pricing trends, is shown in the chart below:



Source: Quarterly averages computed by Tredegar using monthly data from CMAI Global Index data.

The volatility of average quarterly prices of PTA and MEG in Asia (raw materials used in the production of polyester resins produced by Flexible Packaging Films) is shown in the chart below:



Source: Quarterly averages computed by Tredegar using monthly data from CMAI Global Index data.

The Company sells to customers in foreign markets through its foreign operations and through exports from U.S. plants. The percentage of sales and total assets for manufacturing operations related to foreign markets for 2021, 2020 and 2019 are as follows:

Tredegar Corporation									
Percentage of Net Sales and Total Assets Related to Foreign Markets*									
	2021			2020			2019		
	% of Total Net Sales		% Total Assets - Foreign Operations	% of Total Net Sales		% Total Assets - Foreign Operations	% of Total Net Sales		% Total Assets - Foreign Operations
	Exports From U.S.	Foreign Operations		Exports From U.S.	Foreign Operations		Exports From U.S.	Foreign Operations	
Canada	2	—	—	2	—	—	2	—	—
Europe	1	—	—	1	—	—	1	—	—
Latin America	1	12	10	—	13	10	1	12	7
Asia	7	—	3	11	—	4	10	—	3
Total	11	12	13	14	13	14	14	12	10

* The percentages for foreign markets are relative to Tredegar's consolidated net sales and total assets .

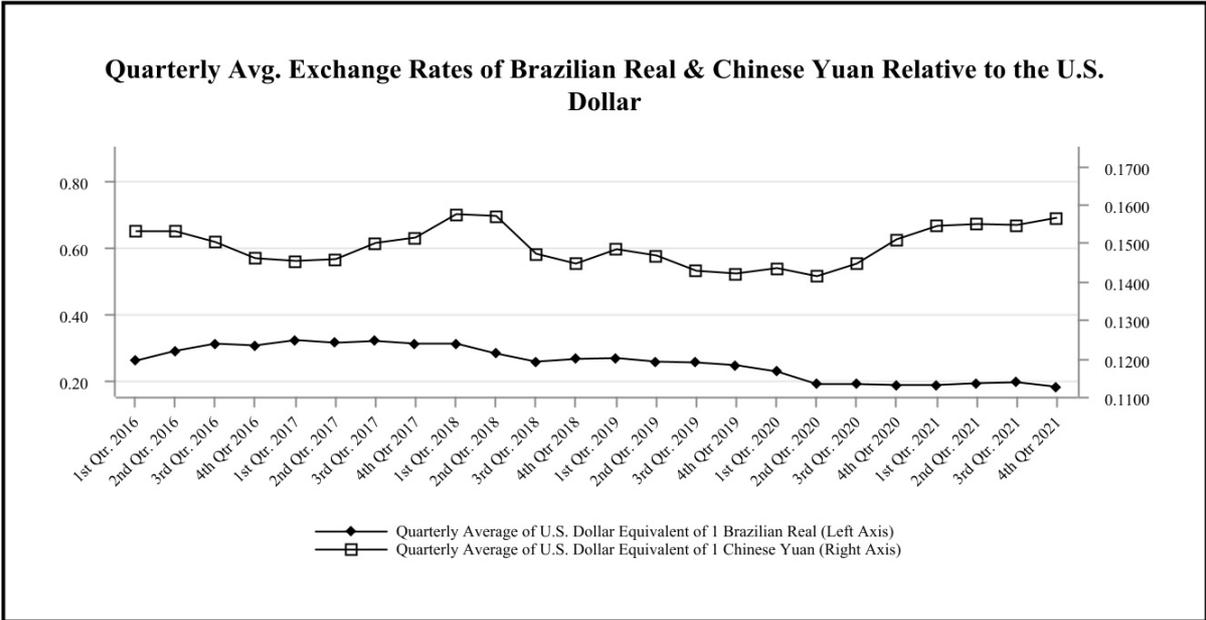
Tredegar attempts to match the pricing and cost of its products in the same currency and generally views the volatility of foreign currencies and the corresponding impact on earnings and cash flow as part of the overall risk of operating in a global environment (for additional information, see trends for the Brazilian Real and Chinese Yuan in the charts on the following page). Exports from the U.S. are generally denominated in U.S. Dollars. The Company's foreign currency exposure on income from continuing foreign operations relates to the Chinese Yuan and the Brazilian Real.

PE Films is generally able to match the currency of its sales and costs for its product lines. For flexible packaging films produced in Brazil, selling prices and key raw material costs are principally determined in U.S. Dollars and are impacted by local economic conditions and local and global competitive dynamics. Flexible Packaging Films is exposed to foreign exchange translation risk (its functional currency is the Brazilian Real) because almost 90% of the sales of Flexible Packaging Films business unit in Brazil ("Terphane Ltda.") and substantially all of its related raw material costs are quoted or priced in U.S. Dollars while its variable conversion, fixed conversion and sales, general and administrative costs before depreciation & amortization (collectively "Terphane Ltda. Operating Costs") are quoted or priced in Brazilian Real. This mismatch, together with a variety of economic variables impacting currency exchange rates, causes volatility that could negatively or positively impact EBITDA from ongoing operations for Flexible Packaging Films.

The Company estimates annual net costs of R\$150 million for the net mismatch translation exposure between Terphane Ltda.'s U.S. Dollar quoted or priced sales and raw material costs and underlying Brazilian Real quoted or priced Terphane Ltda. Operating Costs. Terphane Ltda. has outstanding foreign exchange average forward rate contracts to purchase Brazilian Real and sell U.S. Dollars to hedge its exposure. See Note 10 to the Consolidated Financial Statements in Item 15 for more information on outstanding hedging contracts and this hedging program.

Tredegar estimates that the change in the value of foreign currencies relative to the U.S. Dollar on PE Films had a favorable impact on EBITDA from ongoing operations in PE Films of \$0.3 million in 2021 compared to 2020 and an unfavorable impact on EBITDA from ongoing operations of \$0.7 million in 2020 compared with 2019.

Trends for the Brazilian Real and Chinese Yuan are shown in the chart below:



Source: Quarterly averages computed by Tredegar using daily closing data provided by Bloomberg.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See discussion of *Quantitative and Qualitative Disclosures about Market Risk* in Item 7.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information required by this Item 8 is set forth in Item 15 and is hereby incorporated herein by reference.

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

None.

Item 9A. CONTROLS AND PROCEDURES

On November 1, 2018, the Company filed a Current Report on Form 8-K (the “November 2018 Form 8-K”) to disclose deficiencies in internal control over financial reporting. For further information, see the November 2018 Form 8-K and Item 4. “Controls and Procedures” of the Company’s Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2018. See Item 1A. “Risk Factors” of this Form 10-K for risks and uncertainties associated with management’s report on internal control over financial reporting as of and for the year ended December 31, 2021.

Evaluation of Disclosure Controls and Procedures

In connection with the preparation of this Form 10-K, pursuant to Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), the Company carried out an evaluation with the participation of its management, including its Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), of the effectiveness of the design and operation of our disclosure controls and procedures (as defined under Rule 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2021.

Based on this evaluation, the Company’s Chief Executive Officer and Chief Financial Officer concluded that, because of the material weaknesses in internal control over financial reporting discussed below, the Company’s disclosure controls and procedures were not effective as of December 31, 2021, to ensure: (i) that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act, is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms, and (ii) that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management’s Report on Internal Control Over Financial Reporting

The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company’s internal control over financial reporting is a process designed by or under the supervision of the Company’s Chief Executive Officer and Chief Financial Officer, and overseen by the Board of Directors, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP and includes policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company’s assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that the Company’s receipts and expenditures are being made only in accordance with the authorization of its management and directors; and
- 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 is not intended to provide absolute assurance that a misstatement of the Company’s consolidated financial statements would be prevented or detected. 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.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis.

Management conducted an evaluation of the effectiveness of the Company's internal control over financial reporting using the criteria in *Internal Control - Integrated Framework 2013* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "2013 COSO Framework"). As a result of this evaluation, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2021, because of the material weaknesses in internal control over financial reporting discussed below.

- **Control Environment:** The Company did not have a sufficient number of trained resources with assigned responsibility and accountability for the design, operation and documentation of internal control over financial reporting in accordance with the 2013 COSO Framework.
- **Risk Assessment:** The Company did not have an effective risk assessment process to identify and evaluate at a sufficient level of detail all relevant risks of material misstatement, including fraud risks.
- **Information and Communication:** The Company did not have an effective information and communication process that identified and assessed the source of and controls necessary to ensure the reliability of information used in financial reporting and that communicates relevant information about roles and responsibilities for internal control over financial reporting.
- **Monitoring Activities:** The Company did not have effective monitoring activities to assess the operation of internal control over financial reporting, including the continued appropriateness of control design and level of documentation maintained to support control effectiveness.
- **Control Activities:** As a consequence of the material weaknesses described above, internal control deficiencies related to the design and operation of process-level controls and general information technology controls were determined to be pervasive throughout the Company's financial reporting processes.

While these material weaknesses did not result in material misstatements of the Company's consolidated financial statements as of and for the year ended December 31, 2021, these material weaknesses create a reasonable possibility that a material misstatement of account balances or disclosures in annual or interim consolidated financial statements may not be prevented or detected in a timely manner. Accordingly, the Company concluded that the deficiencies represent material weaknesses in its internal control over financial reporting and its internal control over financial reporting was not effective as of December 31, 2021.

The Company's independent registered public accounting firm, KPMG LLP, which audited the 2021 consolidated financial statements included in this Form 10-K, has expressed an adverse opinion on the operating effectiveness of the Company's internal control over financial reporting. KPMG LLP's report appears on page 40 of this Form 10-K.

Remediation Plan and Efforts to Address the Previously Identified Material Weaknesses

To remediate the material weaknesses described above, the Company, with the oversight of the Audit Committee of the Board of Directors (the "Audit Committee"), has been pursuing the six remediation steps as originally identified in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. The Company's remediation plan was designed with the assistance of management's outside consultant, an internationally recognized accounting firm. The Company continues to work with its outside consultant to assist in completing the remediation plan and believes that its remediation plan will be sufficient to remediate the identified material weaknesses and strengthen its internal control over financial reporting. As the Company continues to evaluate, and works to improve, its internal control over financial reporting, management may determine that additional measures to address control deficiencies or modifications to the remediation plan are necessary.

Through the fourth quarter of 2021, the Company has completed certain steps in its remediation plan, including:

- for certain processes, developed new and revised existing process narratives and identified risks of material misstatement inherent to those processes;
- developed new controls and revised the design of existing controls for a significant number of relevant key controls to mitigate the aforementioned risks, inclusive of general information technology controls and entity-level controls;
- conducted initial organization-wide training sessions with all control owners;
- increased resources in the Company's internal audit function and created and staffed a controls compliance group charged with monitoring and facilitating compliance with the Company's responsibilities under the Sarbanes Oxley Act of 2002 ("SOX"); and
- implemented a software solution to assist in monitoring and documenting compliance with SOX.

The following remaining activities are scheduled for completion in the first half of 2022 in anticipation of conducting management's testing that will begin in the first half of 2022 in support of issuing management's assessment of internal control over financial reporting as of December 31, 2022:

- completion of the identification of risks arising from inappropriate segregation of duties and fraud risks;

- completion of risk assessment and control design for the remaining populations of processes and controls;
- implementation of controls across all financial reporting processes and information technology environments;
- ongoing training with control owners, as necessary; and
- ongoing migration of certain components of a legacy information technology system onto a common information technology environment, including risk assessment, control design and implementation of new and revised controls.

The Company continues to monitor the impact of employee turnover, the COVID-19 pandemic and other external factors on its remediation plan and its assessment of internal control over financial reporting. The material weaknesses cannot be considered remediated until the applicable controls have operated for a sufficient period of time and management has concluded, through testing, that these controls are operating effectively. The Company cannot assure you when it will remediate the identified material weaknesses, nor can it be certain whether additional actions will be required. Moreover, the Company cannot assure you that additional material weaknesses will not arise in the future.

Changes in Internal Control Over Financial Reporting

The Company is in the process of making certain changes in its internal controls to remediate the material weaknesses as described above. The execution of the material aspects of this plan began in the second quarter of 2019. Except as noted above with respect to the completion of certain steps in the remediation plan, there has been no change in the Company's internal control over financial reporting during the quarter ended December 31, 2021, that has materially affected, or is reasonably likely to materially affect, its internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act).

Item 9B. OTHER INFORMATION

None.

Item 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information concerning directors and persons nominated to become directors of Tredegar to be included in the Proxy Statement under the headings “Proposal 1: Election of Directors” and “Tredegar’s Board of Directors” is incorporated herein by reference.

The information concerning corporate governance to be included in the Proxy Statement under the headings “Board Meetings, Meetings of Non-Management Directors and the Board Committees” and “Corporate Governance” is incorporated herein by reference.

Set forth below are the names, ages and titles of the Company’s executive officers:

<u>Name</u>	<u>Age</u>	<u>Title</u>
John M. Steitz	63	President and Chief Executive Officer
D. Andrew Edwards	63	Executive Vice President and Chief Financial Officer
Kevin C. Donnelly	47	Vice President, General Counsel and Corporate Secretary

John M. Steitz. Mr. Steitz was elected President and Chief Executive Officer effective March 19, 2019. He previously served as President and Chief Executive Officer of Addivant Corporation, a leading global supplier of antioxidants, intermediates, inhibitors, modifiers, UV stabilizers and other additives to the plastic and rubber industries, from March 2015 until January 2019, as President and Chief Operating Officer of PQ Corporation, a leading worldwide producer of specialty inorganic performance chemicals and catalysts, from October 2013 until March 2015, as President and Chief Executive Officer of Avantor Performance Materials, a global supplier of ultra-high-purity life sciences materials with strict regulatory and performance specifications, from September 2012 until September 2013, as President and Chief Operating Officer of Albemarle Corporation, a global specialty chemicals company, from March 2012 until August 2012, and as Chief Operating Officer and Executive Vice President of Albemarle from April 2007 until March 2012.

D. Andrew Edwards. Mr. Edwards was named Executive Vice President and Chief Financial Officer effective August 6, 2020. Mr. Edwards served as Vice President and Chief Financial Officer from July 20, 2015 until August 2020. He previously served as the Chief Financial Officer of United Sporting Companies, Inc., a wholesale distributor of outdoor sporting goods, from February 2013 until July 2015 and as Vice President, Controller and Chief Accounting Officer of Owens & Minor, Inc., a distributor of acute medical products, from April 2010 to February 2013 and as Acting Chief Financial Officer of Owens & Minor, Inc. from March 2012 to February 2013. Mr. Edwards also served as Vice President, Finance, of Owens & Minor, Inc. from December 2009 until April 2010. Mr. Edwards previously served as the Company’s Vice President, Chief Financial Officer and Treasurer from August 2003 to December 2009 and as the Company’s Vice President, Finance from November 1998 to August 2003. Mr. Edwards also served as the Company’s Treasurer from May 1997 to December 2009 and as the Company’s Controller from October 1992 until July 2000.

Kevin C. Donnelly. Mr. Donnelly was elected Vice President, General Counsel and Corporate Secretary effective January 1, 2021. He joined Tredegar in 2010 and served as its Associate General Counsel from 2013 to 2020. Prior to joining Tredegar, Mr. Donnelly was an associate at Hunton & Williams LLP (now Hunton Andrews Kurth LLP). He received a B.A. degree from the University of Richmond and a J.D. from the University of Virginia.

Tredegar has adopted a Code of Conduct that applies to all of its directors, officers and employees (including its chief executive officer, chief financial officer and principal accounting officer) and has posted the Code of Conduct on its website. All amendments to or waivers from any provision of the Company’s Code of Conduct applicable to the chief executive officer, chief financial officer and principal accounting officer will be disclosed on the Company’s website. The Company’s internet address is www.tredegar.com.

Item 11. EXECUTIVE COMPENSATION

The information to be included in the Proxy Statement under the headings “Compensation of Directors,” “Board Meetings, Meetings of Non-Management Directors and Board Committees - Executive Compensation Committee Interlocks and Insider Participation,” “Compensation Discussion and Analysis,” “Executive Compensation Committee Report” and “Compensation of Executive Officers” is incorporated herein by reference.

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

The information to be included in the Proxy Statement under the heading “Equity Compensation Plan Information” is incorporated herein by reference.

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

The information to be included in the Proxy Statement under the headings “Certain Relationships and Related Transactions,” “Tredegar’s Board of Directors” and “Board Meetings, Meetings of Non-Management Directors and Board Committees” is incorporated herein by reference.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Our independent registered public accounting firm is KPMG LLP, Richmond, Virginia, Audit Firm ID: 185.

The following is incorporated herein by reference:

- Information on accounting fees and services to be included in the Proxy Statement under the heading “Audit and Non-Audit Fees;” and
- Information on the Audit Committee’s procedures for pre-approving certain audit and non-audit services to be included in the Proxy Statement under the heading “Board Meetings, Meetings of Non-Management Directors and Board Committees—Audit Committee Matters.”

PART IV

Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) List of documents filed as a part of the report:

(1) Financial statements:

Tredegar Corporation

Index to Financial Statements and Supplementary Data

	<u>Page</u>
Auditors' Opinions:	
Report of Independent Registered Public Accounting Firm	38
Opinion on Internal Control Over Financial Reporting	40
Financial Statements:	
Consolidated Balance Sheets	42
Consolidated Statements of Income	43
Consolidated Statements of Comprehensive Income (Loss)	44
Consolidated Statements of Cash Flows	45
Consolidated Statements of Shareholders' Equity	46
Notes to Financial Statements	47
(2) Financial statement schedules:	
None	
(3) Exhibit Index	88

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Tredegar Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Tredegar Corporation and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income (loss), shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 11, 2022 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

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 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. 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.

Fair value of investments measured at net asset value

As discussed in Note 8 to the consolidated financial statements, the fair value of pension plan assets at December 31, 2021 was \$244.6 million. Of this amount, \$49.0 million represents the fair value of private equity, hedge funds and certain international equity securities measured at net asset value (NAV).

We identified the assessment of the fair value of investments measured at NAV as a critical audit matter. Subjective auditor judgment was required in the application and performance of procedures to assess the fair value of the investments measured at NAV because the determination involved the use of unobservable inputs. Additionally, specialized skills and

knowledge were required to assess the fair value of the investments measured at NAV and to assess the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter. For a selection of the investments measured at NAV, we compared:

- the Company's previous estimates of fair value to the NAVs subsequently audited by third parties
- the rates of return to relevant, publicly available market indices
- the estimated fair values to external confirmations received directly from the third-party investment managers.

We involved valuation professionals with specialized skills and knowledge, who assisted in our risk assessment and the design of procedures performed for the investments measured at NAV. With respect to the selection of investments tested, the valuation professionals assisted in assessing the sufficiency of audit evidence obtained by assessing the results of the procedures performed.

/s/ KPMG LLP

We have served as the Company's auditor since 2018.

Richmond, Virginia
March 11, 2022

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Tredegar Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited Tredegar Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weaknesses, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income (loss), shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated March 11, 2022 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The material weaknesses related to an ineffective control environment resulting from an insufficient number of trained resources, ineffective risk assessment, ineffective information and communication, and ineffective monitoring activities resulting in ineffective control activities related to the design and operation of process-level controls and general information technology controls across all financial reporting processes have been identified and included in management's assessment. The material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2021 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ KPMG LLP

Richmond, Virginia
March 11, 2022

CONSOLIDATED BALANCE SHEETS

Tredegar Corporation and Subsidiaries

	December 31	
	2021	2020
(In thousands, except share data)		
Assets		
Current assets:		
Cash and cash equivalents	\$ 30,521	\$ 11,846
Accounts and other receivables, net	103,312	86,327
Income taxes recoverable	2,558	2,807
Inventories	88,569	66,437
Prepaid expenses and other	11,275	19,679
Current assets of discontinued operations	178	1,339
Total current assets	236,413	188,435
Property, plant and equipment, at cost:		
Land and land improvements	4,537	4,544
Buildings	69,406	66,406
Machinery and equipment	424,368	404,669
Total property, plant and equipment	498,311	475,619
Less accumulated depreciation	(327,930)	(309,074)
Net property, plant and equipment	170,381	166,545
Right-of-use leased assets	13,847	16,037
Investment in kaléo (cost basis of \$7,500)	—	34,600
Identifiable intangible assets, net	14,152	18,820
Goodwill	70,608	67,708
Deferred income tax assets	15,723	19,068
Other assets	2,460	3,506
Non-current assets of discontinued operations	—	151
Total assets	\$ 523,584	\$ 514,870
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 123,760	\$ 89,702
Accrued expenses	33,104	40,741
Lease liability, short-term	2,158	2,082
Income taxes payable	9,333	706
Current liabilities of discontinued operations	193	7,521
Total current liabilities	168,548	140,752
Lease liability, long-term	12,831	14,949
Long-term debt	73,000	134,000
Pension and other postretirement benefit obligations, net	78,265	110,585
Other non-current liabilities	6,218	5,529
Total liabilities	338,862	405,815
Shareholders' equity:		
Common stock (no par value):		
Authorized 150,000,000 shares;		
Issued and outstanding— 33,736,629 shares in 2021 and 33,457,176 in 2020 (including restricted stock)	55,174	50,066
Common stock held in trust for savings restoration plan (108,433 shares in 2021 and 105,067 in 2020)	(2,135)	(2,087)
Accumulated other comprehensive income (loss):		
Foreign currency translation adjustment	(85,792)	(84,149)
Gain (loss) on derivative financial instruments	901	2,264
Pension and other postretirement benefit adjustments	(64,613)	(96,519)
Retained earnings	281,187	239,480
Total shareholders' equity	184,722	109,055
Total liabilities and shareholders' equity	\$ 523,584	\$ 514,870

See accompanying notes to financial statements.

CONSOLIDATED STATEMENTS OF INCOME

Tredegar Corporation and Subsidiaries

Years Ended December 31

	2021	2020	2019
(In thousands, except per-share data)			
Revenues and other:			
Sales	\$ 826,455	\$ 755,290	\$ 826,324
Other income (expense), net	20,376	(67,294)	28,371
	846,831	687,996	854,695
Costs and expenses:			
Cost of goods sold	649,690	558,967	641,140
Freight	28,232	25,686	28,980
Selling, general and administrative	74,964	84,246	76,598
Research and development	6,347	8,398	7,893
Amortization of identifiable intangibles	1,704	3,017	13,601
Pension and postretirement benefits	14,160	14,720	9,642
Interest expense	3,386	2,587	4,051
Asset impairments and costs associated with exit and disposal activities, net of adjustments	1,127	1,725	784
Goodwill impairment	—	13,696	—
Total	779,610	713,042	782,689
Income (loss) from continuing operations before income taxes	67,221	(25,046)	72,006
Income tax expense (benefit)	9,284	(8,213)	13,545
Net income (loss) from continuing operations	57,937	(16,833)	58,461
Income (loss) from discontinued operations, net of tax	(111)	(58,611)	(10,202)
Net income (loss)	\$ 57,826	\$ (75,444)	\$ 48,259
Earnings (loss) per share:			
Basic:			
Continuing operations	\$ 1.72	\$ (0.51)	\$ 1.76
Discontinued operations	—	(1.75)	(0.31)
Basic earnings (loss) per share	\$ 1.72	\$ (2.26)	\$ 1.45
Diluted:			
Continuing operations	\$ 1.72	\$ (0.51)	\$ 1.76
Discontinued operations	—	(1.75)	(0.31)
Diluted earnings (loss) per share	\$ 1.72	\$ (2.26)	\$ 1.45
Shares used to compute earnings (loss) per share:			
Basic	33,563	33,402	33,236
Diluted	33,670	33,402	33,258

See accompanying notes to financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

Tredegar Corporation and Subsidiaries

	Years Ended December 31		
	2021	2020	2019
(In thousands)			
Net income (loss)	\$ 57,826	\$ (75,444)	\$ 48,259
Other comprehensive income (loss):			
Unrealized foreign currency translation adjustment (net of tax benefit of \$365 in 2021, net of tax benefit of \$897 in 2020 and net of tax benefit of \$623 in 2019)	(1,643)	(8,781)	(3,723)
Reclassification of foreign currency translation loss realized on the sale of Personal Care Films	—	25,295	—
Derivative financial instruments adjustment (net of tax benefit of \$351 in 2021, net of tax of \$790 in 2020 and net of tax of \$71 in 2019)	(1,363)	3,571	294
Pension & other postretirement benefit adjustments:			
Net gains (losses) and prior service costs (net of tax of \$5,212 in 2021, net of tax benefit of \$4,228 in 2020 and net of tax benefit of \$6,417 in 2019)	18,720	(12,197)	(22,508)
Amortization of prior service costs and net gains or losses (net of tax of \$3,676 in 2021, net of tax of \$3,937 in 2020 and net of tax of \$2,359 in 2019)	13,186	11,359	8,273
Other comprehensive income (loss)	28,900	19,247	(17,664)
Comprehensive income (loss)	\$ 86,726	\$ (56,197)	\$ 30,595

See accompanying notes to financial statements.

CONSOLIDATED STATEMENTS OF CASH FLOWS

Tredegar Corporation and Subsidiaries

	Years Ended December 31		
	2021	2020	2019
	(In thousands)		
Cash flows from operating activities:			
Net income (loss)	\$ 57,826	\$ (75,444)	\$ 48,259
Adjustments for noncash items:			
Depreciation	22,080	28,940	30,683
Amortization of identifiable intangibles	1,704	3,017	13,601
Goodwill impairment	—	13,696	—
Reduction of right-of-use lease asset	2,086	2,753	2,588
Deferred income taxes	(4,944)	(16,892)	5,856
Accrued pension and postretirement benefits	14,160	14,720	9,642
Stock-based compensation expense	5,167	5,402	7,293
(Gain) loss on investment in kaléo	(12,462)	60,900	(10,900)
Loss on sale of divested businesses	—	52,326	—
Net gain on disposal of assets	—	—	(6,334)
Changes in assets and liabilities:			
Accounts and other receivables	(16,993)	(335)	16,471
Inventories	(23,132)	(4,366)	11,315
Income taxes recoverable/payable	8,956	1,617	2,644
Prepaid expenses and other	3,612	(2,203)	795
Accounts payable and accrued expenses	19,835	4,045	(2,937)
Lease liability	(1,935)	(3,049)	(2,723)
Pension and postretirement benefit plan contributions	(5,687)	(12,681)	(8,614)
Other, net	310	1,927	(1,776)
Net cash provided by operating activities	70,583	74,373	115,863
Cash flows from investing activities:			
Capital expenditures	(27,361)	(23,355)	(50,864)
Proceeds from the sale of kaléo	47,062	—	—
Net proceeds on sale of divested businesses	—	56,236	—
Proceeds from the sale of assets and other	4,749	—	10,936
Net cash provided by (used in) investing activities	24,450	32,881	(39,928)
Cash flows from financing activities:			
Borrowings	75,500	162,250	65,500
Debt principal payments	(136,500)	(70,250)	(125,000)
Dividends paid	(16,167)	(216,049)	(15,325)
Debt financing costs	—	(693)	(1,817)
Other	325	(850)	(670)
Net cash used in financing activities:	(76,842)	(125,592)	(77,312)
Effect of exchange rate changes on cash	484	(1,238)	(1,598)
Increase (decrease) in cash and cash equivalents	18,675	(19,576)	(2,975)
Cash and cash equivalents at beginning of period	11,846	31,422	34,397
Cash and cash equivalents at end of period	\$ 30,521	\$ 11,846	\$ 31,422
Supplemental cash flow information:			
Interest payments	\$ 2,923	\$ 1,679	\$ 4,358
Income tax payments (refunds), net	\$ 4,706	\$ 1,670	\$ 2,595

See accompanying notes to financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Tredegar Corporation and Subsidiaries

(In thousands, except share and per-share data)	Accumulated Other Comprehensive Income (Loss)							
	Common Stock		Retained Earnings	Trust for Savings Restoration Plan	Foreign Currency Translation	Gain (Loss) on Derivative Financial Instruments	Pension & Other Postretirement Benefit Adjust	Total Shareholders' Equity
	Shares	Amount						
Balance at January 1, 2019	33,176,024	\$ 38,892	\$ 497,511	\$ (1,559)	\$ (96,940)	\$ (1,601)	\$ (81,446)	\$ 354,857
Net income (loss)	—	—	48,259	—	—	—	—	48,259
Foreign currency translation adjustment	—	—	—	—	(3,723)	—	—	(3,723)
Derivative financial instruments adjustment	—	—	—	—	—	294	—	294
Net gains or (losses) and prior service costs	—	—	—	—	—	—	(22,508)	(22,508)
Amortization of prior service costs and net gains or losses	—	—	—	—	—	—	8,273	8,273
Cash dividends declared (\$0.46 per share)	—	—	(15,325)	—	—	—	—	(15,325)
Stock-based compensation expense	228,959	7,292	—	—	—	—	—	7,292
Repurchase of employee common stock for tax withholdings	(49,444)	(854)	—	—	—	—	—	(854)
Issued upon exercise of stock options	9,500	184	—	—	—	—	—	184
Tredegar common stock purchased by trust for savings restoration plan	—	—	33	(33)	—	—	—	—
Balance at December 31, 2019	33,365,039	45,514	530,478	(1,592)	(100,663)	(1,307)	(95,681)	376,749
Net income (loss)	—	—	(75,444)	—	—	—	—	(75,444)
Foreign currency translation adjustment	—	—	—	—	(8,781)	—	—	(8,781)
Foreign currency translation loss realized on the sale of Personal Care Films	—	—	—	—	25,295	—	—	25,295
Derivative financial instruments adjustment	—	—	—	—	—	3,571	—	3,571
Net gains or (losses) and prior service costs	—	—	—	—	—	—	(12,197)	(12,197)
Amortization of prior service costs and net gains or losses	—	—	—	—	—	—	11,359	11,359
Cash dividends declared (\$6.45 per share)	—	—	(216,049)	—	—	—	—	(216,049)
Stock-based compensation expense	131,354	5,402	—	—	—	—	—	5,402
Repurchase of employee common stock for tax withholdings	(39,217)	(850)	—	—	—	—	—	(850)
Tredegar common stock purchased by trust for savings restoration plan	—	—	495	(495)	—	—	—	—
Balance at December 31, 2020	33,457,176	50,066	239,480	(2,087)	(84,149)	2,264	(96,519)	109,055
Net income (loss)	—	—	57,826	—	—	—	—	57,826
Foreign currency translation adjustment	—	—	—	—	(1,643)	—	—	(1,643)
Derivative financial instruments adjustment	—	—	—	—	—	(1,363)	—	(1,363)
Net gains or (losses) and prior service costs	—	—	—	—	—	—	18,720	18,720
Amortization of prior service costs and net gains or losses	—	—	—	—	—	—	13,186	13,186
Cash dividends declared (\$0.48 per share)	—	—	(16,167)	—	—	—	—	(16,167)
Stock-based compensation expense	229,014	4,783	—	—	—	—	—	4,783
Issued upon exercise of stock options	67,705	915	—	—	—	—	—	915
Repurchase of employee common stock for tax withholdings	(17,266)	(590)	—	—	—	—	—	(590)
Tredegar common stock purchased by trust for savings restoration plan	—	—	48	(48)	—	—	—	—
Balance at December 31, 2021	33,736,629	\$ 55,174	\$ 281,187	\$ (2,135)	\$ (85,792)	\$ 901	\$ (64,613)	\$ 184,722

See accompanying notes to financial statements.

NOTES TO FINANCIAL STATEMENTS

Tredegar Corporation and Subsidiaries

1. NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations. Tredegar Corporation and subsidiaries (collectively “Tredegar,” “the Company,” “we,” “us” or “our”) is an industrial manufacturer with three primary businesses: custom aluminum extrusions for the North American building & construction, automotive and specialty end-use markets; surface protection films for high-technology applications in the global electronics industry and polyethylene overwrap films used in bathroom tissue and paper towels; and polyester-based films for use in packaging applications that have specialized properties primarily for the Latin American and the United States (“U.S.”) flexible packaging markets. The Company’s business segments are Aluminum Extrusions (also referred to as Bonnell Aluminum), PE Films, and Flexible Packaging Films (also referred to as Terphane). More information on the Company’s business segments is provided in Note 13.

On October 30, 2020, the Company completed the sale of its personal care films business (“Personal Care Films”), which was part of its PE Films segment. The transaction excluded the packaging film lines and related operations located at the Pottsville, Pennsylvania manufacturing site (“Pottsville Packaging”), which are now being reported within the Surface Protection component of PE Films. Commencing in the third quarter of 2020, all historical results for Personal Care Films have been presented as discontinued operations.

In December 2020, the Company entered into a definitive agreement to sell Bright View Technologies (“Bright View”). The sale did not represent a strategic shift nor did it have a major effect on the Company’s historical and ongoing operations, thus all financial information for Bright View has been presented as continuing operations in the PE Films segment.

For more information on these transactions, see Note 15 in the Notes to Financial Statements

Basis of Presentation and Principles of Consolidation. The consolidated financial statements include the accounts and operations of the Company and have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). Intercompany balances and transactions have been eliminated in consolidation. Certain amounts for the prior years have been reclassified to conform to current year presentation.

Fiscal Year End. The Company operates on a calendar fiscal year except for the Aluminum Extrusions segment, which operates on a 52/53-week fiscal year basis. References to Aluminum Extrusions for 2021, 2020 and 2019 relate to the 52-week fiscal year ended December 26, 2021, the 52-week fiscal year ended December 27, 2020 and the 52-week fiscal year ended December 29, 2019, respectively. The Company does not believe the impact of reporting the results of this segment in this manner is material to the consolidated financial results. The Company may fund or receive cash from the Aluminum Extrusions segment based on Aluminum Extrusion’s cash flows from operations during the intervening period from Aluminum Extrusion’s fiscal year end to the Company’s calendar year end. There was no intercompany funding with Aluminum Extrusions between December 27, 2021 and December 31, 2021. As of December 31, 2020, the Company’s cash and cash equivalents declined by \$3.8 million since the Company made payments to the Aluminum Extrusions segment to fund its working capital during the intervening period.

Use of Estimates. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses and disclosure of contingent assets and liabilities (if any). On an ongoing basis, the Company evaluates its estimates, including those related to provisions for transaction and credit losses, income taxes, pension, and the valuation of goodwill and intangible assets, among others. Tredegar bases its estimates on historical experience and various other assumptions which the Company believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Risk and Uncertainties. While it is not possible to estimate the impact that the coronavirus pandemic (“COVID-19”) may have on the Company’s business, estimates related to the accounting for impairment of long-lived assets and goodwill, pension benefits and income taxes could be materially adversely affected in future periods. Due to the uncertainty with respect to the magnitude of the impact and duration of COVID-19, future developments associated with COVID-19 may adversely affect the Company’s financial condition, results of operations and cash flows. The Company continues to monitor the impact of COVID-19 on the business and its effect on the consolidated financial statements.

Foreign Currency Translation. The financial statements of subsidiaries located outside the U.S., where the local currency is the functional currency, are translated into U.S. Dollars using exchange rates in effect at the period end for assets and liabilities and average exchange rates during each reporting period for results of operations. Adjustments resulting from the translation of these financial statements are reflected as a separate component of shareholders’ equity. There are no operating subsidiaries located outside the U.S. where the U.S. Dollar is the functional currency. Transaction and remeasurement gains or losses included in income were losses of \$0.5 million, gains of \$0.6 million and losses of \$0.6 million in 2021, 2020 and 2019, respectively. These amounts do not include the effects between reporting periods that exchange rate changes have on income of the locations outside the U.S. that result from translation into U.S. Dollars.

Cash and Cash Equivalents. Cash and cash equivalents consist of cash on hand in excess of daily operating requirements and highly liquid investments with original maturities of three months or less. At December 31, 2021 and 2020, Tredegar had cash and cash equivalents of \$30.5 million and \$11.8 million, respectively, including funds held in locations outside the U.S. of \$16.4 million and \$9.4 million, respectively.

The Company's policy permits investment of excess cash in marketable securities that have the highest credit ratings and maturities of less than one year. The primary objectives of the policy are safety of principal and liquidity.

Accounts and Other Receivables, net. Accounts receivable are stated at the amount invoiced to customers less allowances for doubtful accounts. Accounts receivable are non-interest bearing and arise from the sale of product to customers under typical industry trade terms. Notes receivable are immaterial. Past due amounts are determined based on established terms and charged-off when deemed uncollectible. The allowance for doubtful accounts is determined based on an assessment of probable losses taking into account past due amounts, customer credit profile, historical experience and current economic conditions. For receivables that do not have a specific allowance, the loss rate is computed by segment to apply to the remaining receivables balance, using each segment's historic loss rate. Other receivables include value-added taxes related to certain foreign subsidiaries and other miscellaneous receivables due within one year. For certain customers, the Company has arrangements in place with financial institutions whereby certain customer receivables are sold to the financial institution at a discount and without recourse. Upon sale, the associated receivable is unrecognized and the discount is recognized as a reduction of sales. For more information on accounts receivable and other receivables, net, see Note 2.

Inventories. Inventories are stated at the lower of cost or market, with cost determined using the last in, first out ("LIFO"), the weighted average cost or the first in, first out method. Cost elements included in work-in-process and finished goods inventories are raw materials, direct labor and manufacturing overhead. Finished goods, work-in-process, raw materials and supplies, stores and other inventory are reviewed to determine if inventory quantities are in excess of forecasted usage or if they have become obsolete.

Property, Plant and Equipment. Accounts include costs of assets constructed or purchased, related delivery and installation costs and interest incurred on significant capital projects during their construction periods. Expenditures for renewals and betterments also are capitalized, but expenditures for repairs and maintenance are expensed as incurred. The cost and accumulated depreciation applicable to assets retired or sold are removed from the respective accounts, and gains or losses thereon are included in income. Capital expenditures for property, plant and equipment include capitalized interest. Capitalized interest included in capital expenditures for property, plant and equipment was \$0.1 million, \$0.1 million and \$0.3 million in 2021, 2020 and 2019, respectively. Depreciation is computed primarily by the straight-line method based on the estimated useful lives of the assets that generally range from 5 to 40 years for buildings and land improvements and 2 to 20 years for machinery and equipment.

Goodwill and Identifiable Intangibles. The excess of the purchase price over the fair value of identifiable net assets of acquired companies is allocated to goodwill. The Company assesses goodwill for impairment when events or circumstances indicate that the carrying value may not be recoverable or, at a minimum, on an annual basis (December 1st of each year). When assessing goodwill for impairment, accounting guidance allows the Company to first perform a qualitative assessment about the likelihood of the carrying value of a reporting unit exceeding its fair value, referred to as the "Step 0" assessment. The Step 0 assessment requires the evaluation of certain qualitative factors, including macroeconomic conditions, industry and market considerations, cost factors and overall financial performance, as well as company and reporting unit factors. If the Company's Step 0 analysis indicates that it is more likely than not that the fair value of a reporting unit is less than the carrying amount, then the Company would perform a quantitative impairment test that estimates the fair value of its reporting units using discounted cash flow analyses and comparative enterprise value-to-EBITDA (earnings before interest, taxes, depreciation and amortization) multiples.

During the first three months of 2020, the Company performed goodwill impairment tests and recognized a goodwill impairment charge of \$13.7 million (\$10.5 million after taxes), which represented the entire amount of goodwill associated with Aluminum Extrusions' AACOA reporting unit. The operations of the AACOA reporting unit, which includes the Niles, Michigan and Elkhart, Indiana facilities, were expected to be severely impacted by COVID-19, with over 80% of the aluminum extrusions manufactured at these facilities sold to customers that make consumer durable products, such as recreational boating and power sports vehicles, and to customers serving the building and construction and automotive markets.

As of December 1, 2021, the Company's reporting units with goodwill were Surface Protection in PE Films and Futura in Aluminum Extrusions. Both of these reporting units have separately identifiable operating net assets (operating assets including goodwill and identifiable intangible assets net of operating liabilities). In addition, the Company applied the Step 0 goodwill assessment to Surface Protection and Futura; both had fair values significantly in excess of their carrying amounts when last tested using the quantitative impairment test. The Company's Step 0 analyses in 2021 of these reporting units concluded that it is not more likely than not that the fair values of each reporting unit was less than its carrying amount. Therefore, the quantitative goodwill impairment tests for these reporting units were not necessary in 2021. The Surface

Protection and Futura reporting units had goodwill in the amounts of \$57.3 million and \$13.3 million, respectively, at December 31, 2021. For more information on goodwill and identifiable intangibles, see Note 5.

Impairment of Long-Lived Assets. The Company reviews long-lived assets for possible impairment when events indicate that an impairment may exist. For assets that are held and used in operations, if events indicate that an asset may be impaired, the Company estimates the future unlevered pre-tax cash flows expected to result from the use of the asset and its eventual disposition. Assets are grouped for this purpose at the lowest level for which there are identifiable and independent cash flows. If the sum of these undiscounted pre-tax cash flows is less than the carrying amount of the asset group, an impairment loss is calculated. Measurement of the impairment loss is the amount by which the carrying amount exceeds the estimated fair value of the asset group. As of December 31, 2021 and 2020, no events were identified that indicated long-lived assets may be impaired.

Assets that are held for sale are reported at the lower of their carrying amount or estimated fair value less cost to sell, with an impairment loss recognized for any write-down required.

Pension Costs and Postretirement Benefit Costs Other than Pensions. Pension costs and postretirement benefit costs other than pensions have been accrued over the period employees provided service to Tredegar. Liabilities and expenses for pension plans and other postretirement benefits are determined using actuarial methodologies and incorporate significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions relating to the employee workforce. The Company recognizes the funded status of its pension and other postretirement plans in the accompanying consolidated balance sheets. Tredegar's policy is to fund its pension plans at amounts not less than the minimum requirements of the Employee Retirement Income Security Act ("ERISA") of 1974 and to fund postretirement benefits other than pensions when claims are incurred.

On February 10, 2022, Tredegar announced the initiation of a process to terminate and settle its frozen defined benefit pension plan, which could take up to 24 months to complete. In connection therewith, on February 9, 2022, the Company contributed \$50 million to the pension plan (the "Special Contribution"). The Company estimates that, with the Special Contribution, there will be no required minimum contributions to the pension plan until final settlement. As of December 31, 2021, no adjustment to the consolidated financial statements has been recognized as a result of this announcement and Special Contribution made in 2022. As the settlement process occurs, the Company expects to recognize a non-cash reclassification adjustment to net income or loss of other comprehensive net actuarial losses associated with the pension plan currently reflected directly in shareholders' equity. Other comprehensive net actuarial losses associated with the pension plan were approximately \$109 million on a pretax basis as of December 31, 2021.

Additional disclosure regarding Tredegar's pension costs and postretirement benefit costs other than pensions is included in Note 8.

Revenue Recognition. The Company's revenue is primarily generated from the sale of finished products to customers. Those sales predominantly contain a single performance obligation and revenue is recognized at the point in time when control of the product is transferred to customers, along with the title, risk of loss and rewards of ownership. Depending on the arrangement with the customer, these criteria are met either at the time the product is shipped or when the product is made available or delivered at the destination specified in the agreement with the customer.

Sales revenue is recognized in an amount that reflects the consideration the Company expects to be entitled to in exchange for that finished product. The Company offers various discounts, rebates and allowances to customers, (collectively, "allowances"), all of which are considered when determining the transaction price. Certain allowances are fixed and determinable at the time of sale and are recorded at the time of sale as a reduction to revenues. Other allowances can vary depending on future outcomes such as sales returns and customer sales volume, thus represents variable consideration.

Amounts billed to customers related to freight are classified as sales revenue and the cost of freight is classified as a separate line in the accompanying consolidated statements of income. Taxes assessed by a governmental authority that are both imposed on and concurrent with a specific revenue-producing transaction between Tredegar and its customers (such as value-added taxes) are accounted for on a net basis and therefore excluded from revenues. See Note 13 for disaggregation of revenue by segment and type. See Note 2 for a table showing accounts and other receivables, net of allowance for bad debts.

Revenue expected to be recognized in any future period related to remaining performance obligations, excluding i) revenue pertaining to contracts that have an original expected duration of one year or less, ii) contracts where revenue is recognized as invoiced and iii) variable consideration related to unsatisfied performance obligations, is not expected to materially impact the Company's financial results.

Research & Development ("R&D") Costs. R&D costs are expensed as incurred and include primarily salaries, wages, employee benefits, equipment depreciation, facility costs and the cost of materials consumed relating to R&D efforts. R&D costs include a reasonable allocation of indirect costs.

Leases. At inception, the Company determines if an arrangement contains a lease and whether that lease meets the classification criteria of a finance or operating lease. The Company has elected to not record short-term leases with an original lease term of one year or less in the consolidated balance sheet. To the extent such leases contain renewal options that the Company intends to exercise, the related Right-of-Use (“ROU”) asset and lease liability are included in the consolidated balance sheet. Some of the Company’s lease arrangements contain lease components (e.g., minimum rent payments) and non-lease components (e.g., maintenance, labor charges, etc.). The Company generally accounts for the lease and non-lease components as a single lease component.

Certain of the Company’s lease agreements include rental payments that are adjusted periodically for an index or rate. The leases are initially measured using the projected payments adjusted for the index or rate in effect at the commencement date. The Company’s lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Operating leases are included in “Right-of-use lease assets”, “Lease liabilities - short-term” and “Lease liabilities - long-term” on the consolidated balance sheets. These assets and liabilities are recognized at the commencement date based on the present value of remaining lease payments over the lease term using the Company’s secured incremental borrowing rates, adjusted for term and geographic location using country-based swap rates. As a result of the Company’s review of new and existing lease contracts, there were no instances where the Company could readily determine a rate implicit in the lease.

Lease expense for operating leases is recognized on a straight-line basis over the lease term. Variable lease expense is recognized in the period in which the obligation for those payments is incurred. Depending upon the specific use of the ROU asset, lease expense is included in the “Cost of goods sold”, “Freight”, “Selling, general and administrative”, and “Research and development” line items on the consolidated statements of income. Lease income is not material to the results of operations for the years ended December 31, 2021 and 2020, respectively. Additional disclosure regarding Tredegar’s leases is included in Note 4.

Income Taxes. Income taxes are recognized during the period in which transactions enter into the determination of income for financial reporting purposes, with deferred income taxes being provided at enacted statutory tax rates on the differences between the financial reporting and tax bases of assets and liabilities (see Note 12). Tredegar’s policy is to accrue U.S. federal income taxes to the extent required under GAAP on unremitted earnings of all foreign subsidiaries where required. However, due to changes in the taxation of dividends under the Tax Cuts and Jobs Act (the “TCJA”) enacted by the U.S. government in December 2017, Tredegar only records U.S. federal income taxes on unremitted earnings of its foreign subsidiaries where Tredegar cannot take steps to eliminate any potential tax on future distributions from its foreign subsidiaries. Because of the accumulation of significant losses related to foreign currency translations at Terphane Limitada, there were no unrecorded deferred income tax liabilities associated with U.S. federal income taxes and foreign withholding taxes on Terphane Limitada’s undistributed earnings as of December 31, 2021 and December 31, 2020.

A valuation allowance is recorded in the period when the Company determines that it is more likely than not that all or a portion of deferred income tax assets may not be realized. The establishment and removal of a valuation allowance requires the Company to consider all positive and negative evidence and make a judgmental decision regarding the amount of valuation allowance required as of a reporting date. The benefit of an uncertain tax position is included in the accompanying financial statements when the Company determines that it is more likely than not that the position will be sustained, based on the technical merits of the position, if the taxing authority examines the position and the dispute is litigated. This determination is made on the basis of all the facts, circumstances and information available as of the reporting date.

Earnings Per Share. Basic earnings per share is computed using the weighted average number of shares of common stock outstanding. Diluted earnings per share is computed using the weighted average common and potentially dilutive common equivalent shares outstanding, determined as follows:

	2021	2020	2019
Weighted average shares outstanding used to compute basic earnings per share	33,562,684	33,402,147	33,236,115
Incremental shares attributable to stock options and restricted stock	107,566	—	22,022
Shares used to compute diluted earnings per share	33,670,250	33,402,147	33,258,137

Incremental shares attributable to stock options and restricted stock are computed using the average market price during the related period. For the year ended December 31, 2021, average out-of-the-money options to purchase shares that were excluded from the calculation of incremental shares attributable to stock options and restricted stock were 1,582,222. The Company had a net loss from continuing operations for the year ended December 31, 2020, so there is no dilutive impact for such shares. If the Company had reported net income from continuing operations for the year ended December 31, 2020, average out-of-the-money options to purchase shares that were excluded from the calculation of incremental shares attributable to stock options and restricted stock were 1,212,375. For the year ended December 31, 2019, average out-of-the-money options

to purchase shares that were excluded from the calculation of incremental shares attributable to stock options and restricted stock were 209,592.

Stock-Based Employee Compensation Plans. The cost of all share-based payments is recognized using the calculated fair value at the grant date, or the date of any later modification, over the requisite service period under the graded-vesting method. See Note 11 for additional information.

Financial Instruments. Tredegar uses derivative financial instruments for the purpose of hedging aluminum price volatility and currency exchange rate exposures that exist as part of transactions associated with ongoing business operations. The Company's derivative financial instruments are designated as and qualify as cash flow hedges and are recognized in the accompanying balance sheet at fair value. A change in the fair value of the derivative that is highly effective and that is designated and qualifies as a cash flow hedge is recorded in other comprehensive income. Gains and losses reported in other comprehensive income (loss) are reclassified to earnings in the periods in which earnings are affected by the variability of cash flows of the hedged transaction. Such gains and losses are reported in the same line as the underlying hedged item, and the cash flows related to financial instruments are classified in the consolidated statements of cash flows in a manner consistent with those of the transactions being hedged.

The Company's policy requires that it formally document all relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Company also uses regression analysis, unless the hedge qualifies for other methods of assessing effectiveness, to formally assess (both at the hedge's inception and on an ongoing basis) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. When it is determined that a derivative is not (or has ceased to be) highly effective as a hedge, the Company discontinues hedge accounting prospectively.

As a policy, Tredegar does not engage in speculative or leveraged transactions, nor does it hold or issue financial instruments for trading purposes. Additional disclosure of the utilization of derivative hedging instruments is included in Note 10.

Comprehensive Income (Loss). Comprehensive income (loss) is defined as net income or loss as adjusted by other comprehensive income or loss items. Other comprehensive income (loss) includes changes in foreign currency translation adjustments, unrealized gains and losses on derivative financial instruments, prior service costs and net gains or losses from pension and other postretirement benefit plans arising during the period and amortization of these prior service costs and net gain or loss adjustments, all recorded net of deferred income taxes.

The changes in accumulated other comprehensive income (loss) by component are summarized as follows:

	Foreign Currency Translation	Gain (Loss) on Derivative Financial Instruments	Pension & Other Postretirement Benefit Adjust	Total Accumulated Other Comprehensive Income (Loss)
Balance at January 1, 2019	\$ (96,940)	\$ (1,601)	\$ (81,446)	\$ (179,987)
Other comprehensive income (loss)	(4,346)	(3,214)	(28,925)	(36,485)
Income tax (expense) benefit	623	528	6,417	7,568
Other comprehensive income (loss), net of tax	(3,723)	(2,686)	(22,508)	(28,917)
Reclassification adjustment to net income (loss)	—	3,578	10,632	14,210
Income tax (expense) benefit	—	(598)	(2,359)	(2,957)
Reclassification adjustment to net income (loss), net of tax	—	2,980	8,273	11,253
Other comprehensive income (loss), net of tax	(3,723)	294	(14,235)	(17,664)
Balance at December 31, 2019	(100,663)	(1,307)	(95,681)	(197,651)
Other comprehensive income (loss)	(9,678)	(4,362)	(16,425)	(30,465)
Income tax (expense) benefit	897	1,077	4,228	6,202
Other comprehensive income (loss), net of tax	(8,781)	(3,285)	(12,197)	(24,263)
Reclassification adjustment to net income (loss)	25,295	8,724	15,296	49,315
Income tax (expense) benefit	—	(1,868)	(3,937)	(5,805)
Reclassification adjustment to net income (loss), net of tax	25,295	6,856	11,359	43,510
Other comprehensive income (loss), net of tax	16,514	3,571	(838)	19,247
Balance at December 31, 2020	(84,149)	2,264	(96,519)	(178,404)
Other comprehensive income (loss)	(2,008)	3,800	23,932	25,724
Income tax (expense) benefit	365	(842)	(5,212)	(5,689)
Other comprehensive income (loss), net of tax	(1,643)	2,958	18,720	20,035
Reclassification adjustment to net income (loss)	—	(5,513)	16,862	11,349
Income tax (expense) benefit	—	1,192	(3,676)	(2,484)
Reclassification adjustment to net income (loss), net of tax	—	(4,321)	13,186	8,865
Other comprehensive income (loss), net of tax	(1,643)	(1,363)	31,906	28,900
Balance at December 31, 2021	\$ (85,792)	\$ 901	\$ (64,613)	\$ (149,504)

The amounts reclassified out of accumulated other comprehensive income (loss) related to pension and other postretirement benefits is included in the computation of net periodic pension costs, see Note 8 for additional details.

Accounting Standards Adopted.

In December 2019, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2019-12, which simplifies the accounting for income taxes by eliminating certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period, hybrid taxes and the recognition of deferred tax liabilities for outside basis differences. It also clarifies and simplifies other aspects of the accounting for income taxes. In the first quarter of 2021, the Company adopted ASU 2019-12, which did not have a material impact on the Company’s consolidated financial statements.

Accounting Standards Not Yet Adopted.

In March 2020, the FASB issued ASU 2020-04, which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by the discontinuation of the London Interbank Offered Rate or by another reference rate expected to be discontinued because of reference rate reform. The guidance was effective beginning March 12, 2020 and can be applied prospectively through December 31, 2022. In January 2021, the FASB issued ASU 2021-01, which clarified the scope and application of the original guidance. The Company is currently evaluating the potential impact of adopting this guidance, but does not expect it to have a material impact on the consolidated financial statements.

2. ACCOUNTS AND OTHER RECEIVABLES

As of December 31, 2021 and 2020, accounts receivable and other receivables, net, were \$103.3 million and \$86.3 million, respectively, made up of the following:

(In thousands)	2021	2020
Customer receivables	\$ 102,090	\$ 85,274
Other accounts and notes receivable	2,958	3,850
Total accounts and other receivables	105,048	89,124
Less: Allowance for bad debts ^(a)	(1,736)	(2,797)
Total accounts and other receivables, net	\$ 103,312	\$ 86,327

(a) As of December 31, 2021, the Company recorded a reclassification of \$0.8 million from accounts receivable, net to accrued expenses to account for the Company’s estimated obligation to customers for product returns that may result in either a customer credit or refund. Prior to December 31, 2021, the Company presented estimated sales returns as a reduction to accounts receivable.

A reconciliation of the beginning and ending balances of the allowance for doubtful accounts for the three years ended December 31, 2021 is as follows:

(In thousands)	2021	2020	2019
Balance, beginning of year	\$ 2,797	\$ 1,904	\$ 2,054
Charges to expense	1,440	1,901	715
Recoveries	35	(90)	(38)
Write-offs and settlements	(1,246)	(709)	(756)
Foreign exchange and other	(515)	(209)	(71)
Reclassification to accrued expenses for estimated sales returns	(775)	—	—
Balance, end of year	\$ 1,736	\$ 2,797	\$ 1,904

3. INVENTORIES

Inventories consist of the following:

(In thousands)	2021	2020
Finished goods	\$ 25,199	\$ 15,251
Work-in-process	11,955	9,098
Raw materials	32,958	25,913
Stores, supplies and other	18,457	16,175
Total	\$ 88,569	\$ 66,437

Inventories stated on the LIFO basis amounted to \$18.8 million at December 31, 2021 and \$14.4 million at December 31, 2020, which were below replacement costs by \$27.5 million at December 31, 2021 and \$12.1 million at December 31, 2020. Inventories stated on the weighted average cost basis were \$30.9 million and \$33.6 million at December 31, 2021 and 2020, respectively, while inventories stated on the first in, first out method amounted to \$38.9 million and \$18.4 million at December 31, 2021 and 2020, respectively.

4. LEASES

Tredegear has various operating lease agreements with remaining terms up to 9 years, including leases of real estate, office equipment and vehicles. As of December 31, 2021 and 2020, the Company had no finance lease agreements. Some leases include options to purchase the leased asset, terminate the agreement or extend the term of the agreement for one or more years. These options are included in the lease term when it is reasonably certain that the option will be exercised.

The following table presents information about the amount, timing and uncertainty of cash flows arising from the Company's operating leases as of December 31, 2021:

(In thousands)	Future Lease Payments
2022	\$ 2,594
2023	2,478
2024	2,417
2025	2,417
2026	2,079
Thereafter	5,326
Total undiscounted operating lease payments	17,311
Less: Imputed interest	2,322
Present value of operating lease liabilities	\$ 14,989

The following table summarizes lease costs, related cash flow and other information for the years ended December 31, 2021 and 2020. These costs are primarily related to long-term operating leases, but also include amounts for variable leases and short-term leases.

(In thousands)	2021	2020
Operating lease expense	\$ 2,752	\$ 3,260
Right-of-use assets recognized as non-cash additions from the execution of new operating leases	\$ —	\$ 529
Other Information:		
Weighted-average remaining lease term for operating leases	7 years	8 years
Weighted-average discount rate for operating leases	4.22 %	4.21 %

5. GOODWILL AND IDENTIFIABLE INTANGIBLE ASSETS

The components of goodwill and identifiable intangibles at December 31, 2021 and 2020, and related amortization periods are as follows:

(In thousands)	2021	2020	Amortization Periods
Goodwill	\$ 70,608	\$ 67,708	Not amortized
Identifiable intangible assets, net:			
Customer relationships (cost basis of \$26,526 in 2021 and \$29,450 in 2020)	13,259	17,551	10-12 years
Proprietary technology (cost basis of \$3,721 in 2021 and \$3,726 in 2020)	118	194	Not more than 15 years
Trade names (cost basis of \$13,338 in 2021 and \$13,397 in 2020)	775	1,075	5 - 13 years
Total carrying value of identifiable intangibles	14,152	18,820	
Total carrying value of goodwill and identifiable intangible assets	\$ 84,760	\$ 86,528	

A reconciliation of goodwill at December 31, 2021 and 2020 is as follows:

(In thousands)	Aluminum Extrusions ^(a)	PE Films ^(a)	Total
Net carrying value of goodwill at December 31, 2019	\$ 24,066	\$ 57,338	\$ 81,404
Goodwill impairment charge	(13,696)	—	(13,696)
Net carrying value of goodwill at December 31, 2020	10,370	57,338	67,708
Out-of-period adjustment	2,900	—	2,900
Net carrying value of goodwill at December 31, 2021	\$ 13,270	\$ 57,338	\$ 70,608

(a) The goodwill of Aluminum Extrusions and PE Films is carried by the Futura and Surface Protection reporting units, respectively.

During the fourth quarter of 2021, the Company recorded an out-of-period adjustment in connection with the original valuation of intangible assets and goodwill related to the acquisition of Futura in February 2017. This adjustment resulted in a reclassification of \$2.9 million from acquired customer relationship intangible assets to goodwill and a \$0.9 million decrease to accumulated amortization and amortization expense as of and for the period ended December 31, 2021.

A reconciliation of identifiable intangibles at December 31, 2021 and 2020 is as follows:

(In thousands)	Customer Relationships	Proprietary Technology	Trade Names	Total
Aluminum Extrusions:				
Net carrying value at December 31, 2019	\$ 19,644	\$ 55	\$ —	\$ 19,699
Amortization expense	(2,480)	(20)	—	(2,500)
Net carrying value at December 31, 2020	17,164	35	—	17,199
Amortization expense ^(a)	(2,239)	(20)	—	(2,259)
Out-of-period Adjustment ^(b)	(1,953)	—	—	(1,953)
Net carrying value at December 31, 2021	\$ 12,972	\$ 15	\$ —	\$ 12,987
PE Films:				
Net carrying value at December 31, 2019	\$ —	\$ 610	\$ —	\$ 610
Amortization expense	—	(120)	—	(120)
Bright View disposal	—	(490)	—	(490)
Net carrying value at December 31, 2020	—	—	—	—
Amortization expense	—	—	—	—
Net carrying value at December 31, 2021	\$ —	\$ —	\$ —	\$ —
Flexible Packaging Films:				
Net carrying value at December 31, 2019	\$ 554	\$ 230	\$ 1,543	\$ 2,327
Amortization expense	(84)	(53)	(260)	(397)
Increase (decrease) due to foreign currency translation	(83)	(18)	(208)	(309)
Net carrying value at December 31, 2020	387	159	1,075	1,621
Amortization expense	(82)	(53)	(257)	(392)
Increase (decrease) due to foreign currency translation	(18)	(3)	(43)	(64)
Net carrying value at December 31, 2021	\$ 287	\$ 103	\$ 775	\$ 1,165
Total net carrying value of identifiable intangibles at December 31, 2021	\$ 13,259	\$ 118	\$ 775	\$ 14,152

(a) Excludes a reduction of \$0.9 million to amortization expense related to the out-of-period adjustment.

(b) Represents a \$2.9 million gross reclassification from customer relationship intangible assets to goodwill offset by a \$0.9 million decrease to accumulated amortization as a result of the out-of-period adjustment.

Amortization expense over the next five years is expected to be as follows:

Year	Amount (In thousands)
2022	\$ 2,579
2023	1,953
2024	1,913
2025	1,913
2026	1,913

6. ACCRUED EXPENSES

Accrued expenses consist of the following:

(In thousands)	2021	2020
Incentive compensation	\$ 7,016	\$ 8,138
Payrolls, related taxes and medical and other benefits	6,903	9,571
Vacation	3,452	7,283
Workers' compensation and disabilities	2,422	2,986
Accrued freight	2,337	1,397
Accrued utilities	1,938	1,460
Customer rebates	1,857	1,398
Environmental liabilities (current)	1,634	2,066
Derivative contract liability	1,254	487
Accrued severance	445	1,894
Other	3,846	4,061
Total	\$ 33,104	\$ 40,741

In the fourth quarter of 2021, the Company changed its vacation policy such that effective January 1, 2022 substantially all U.S. employees earn their vacation for the current year on a monthly basis throughout the year and forfeit any unused vacation at the end of the year, with the exception of a partial rollover allowance subject to a cap or where forfeiture is prohibited by applicable state or local law or a collective bargaining agreement. Under the previous policy, vacation was granted at the beginning of the year in advance of work being performed for the subsequent year. As a result of this policy change, the Company recorded in the fourth quarter of 2021 a reduction of \$3.9 million to accrued expenses and a decrease to selling, general, and administrative expense (\$1.3 million) and cost of goods sold (\$2.6 million) within the consolidated statements of income.

7. DEBT AND CREDIT AGREEMENTS

Tredegar has a five-year secured revolving credit agreement (the "Credit Agreement") providing for aggregate borrowings in an amount of \$375 million, which matures in June 2024.

Borrowings under the Credit Agreement bear an interest rate of LIBOR plus a credit spread and commitment fees charged on the unused amount under the Credit Agreement at various indebtedness-to-Credit EBITDA levels as follows:

Pricing Under Credit Agreement (Basis Points)		
Indebtedness-to-Credit EBITDA Ratio	Credit Spread Over LIBOR	Commitment Fee
> 3.5x but ≤ 4.0x	200.0	40
> 3.0x but ≤ 3.5x	187.5	35
> 2.0x but ≤ 3.0x	175.0	30
> 1.0x but ≤ 2.0x	162.5	25
≤ 1.0x	150.0	20

At December 31, 2021, the interest cost on debt borrowed under the Credit Agreement was priced at one-month LIBOR plus the applicable credit spread of 150.0 basis points.

The most restrictive covenants in the Credit Agreement include:

- Maximum indebtedness-to-Credit EBITDA ("Leverage Ratio") of 4.00x;
- Minimum Credit EBITDA-to-interest expense of 3.00x; and
- Maximum aggregate distributions to shareholders over the remaining term of the Credit Agreement of \$75 million; provided, that if the Leverage Ratio of equal to or greater than 3.00x, a limitation on such payments for the succeeding quarter at the greater of (i) \$4.75 million and (ii) 50% of consolidated net income for the most recent fiscal quarter.

The Credit Agreement is secured by substantially all of the Company's and its domestic subsidiaries' assets, including equity in certain material first-tier foreign subsidiaries. At December 31, 2021, based upon the most restrictive covenant within the Credit Agreement, available credit under the Credit Agreement was approximately \$287 million. Total debt outstanding was \$73 million and \$134 million as of December 31, 2021 and 2020, respectively.

Tredegar was in compliance with all of its debt covenants as of December 31, 2021. Noncompliance with any of the debt covenants may have a material adverse effect on its financial condition or liquidity, in the event such noncompliance cannot be cured or should the Company be unable to obtain a waiver from the lenders. Renegotiation of the covenant through an amendment to the Credit Agreement may effectively cure the noncompliance, but may have an effect on its financial condition or liquidity depending upon how the covenant is renegotiated.

8. RETIREMENT PLANS AND OTHER POSTRETIREMENT BENEFITS

Tredegar sponsors a noncontributory defined benefit (pension) plan covering certain current and former U.S. employees. The plan for salaried and hourly employees currently in effect is based on a formula using the participant's years of service and compensation or using the participant's years of service and a dollar amount. The plan is closed to new participants and pay for active plan participants for benefit calculations was frozen as of December 31, 2007. As of January 31, 2018, the plan no longer accrued benefits associated with crediting employees for service, thereby freezing all future benefits under the plan.

Tredegar also has a non-qualified supplemental pension plan covering certain employees. Effective December 31, 2005, further participation in this plan was terminated and benefit accruals for existing participants were frozen. The plan was designed to restore all or a part of the pension benefits that would have been payable to designated participants from the principal pension plans if it were not for limitations imposed by income tax regulations. The projected benefit obligation relating to this unfunded plan was \$2.1 million and \$2.2 million at December 31, 2021 and December 31, 2020, respectively. Pension expense recognized for this plan was \$0.1 million in 2021, 2020, and 2019. This information has been included in the pension benefit tables below.

In addition to providing pension benefits, the Company provides postretirement life insurance and health care benefits for certain groups of employees. Tredegar and retirees share in the cost of postretirement health care benefits, with employees hired on or before January 1, 1993, receiving a fixed subsidy to cover a portion of their health care premiums. The Company eliminated prescription drug coverage for Medicare-eligible retirees as of January 1, 2006. Consequently, Tredegar is not eligible for any federal subsidies.

Pension and other postretirement benefit liabilities related to Personal Care Films have been retained by the Company. Pension expense recognized for participation by these former employees in the Company's plans is not material for the years ended December 31, 2021, 2020, and 2019.

The following tables reconcile the changes in benefit obligations and plan assets in 2021 and 2020, and reconcile the funded status to prepaid or accrued cost at December 31, 2021 and 2020:

(In thousands)	Pension Benefits		Other Post-Retirement Benefits	
	2021	2020	2021	2020
Change in benefit obligation:				
Benefit obligation, beginning of year	\$ 336,159	\$ 318,763	\$ 8,164	\$ 7,650
Service cost	—	—	21	29
Interest cost	8,398	10,156	195	243
Effect of actuarial (gains) losses related to the following:				
Discount rate change	(12,512)	26,887	(272)	644
Retirement rate assumptions and mortality table adjustments	1,028	(3,446)	(1)	13
Other	(101)	69	(274)	55
Plan participant contributions	—	—	613	606
Benefits paid	(16,803)	(16,270)	(1,076)	(1,076)
Benefit obligation, end of year	\$ 316,169	\$ 336,159	\$ 7,370	\$ 8,164
Change in plan assets:				
Plan assets at fair value, beginning of year	\$ 233,075	\$ 218,329	\$ —	\$ —
Actual return on plan assets	23,131	18,800	—	—
Employer contributions	5,209	12,216	463	470
Plan participant contributions	—	—	613	606
Benefits paid	(16,803)	(16,270)	(1,076)	(1,076)
Plan assets at fair value, end of year	\$ 244,612	\$ 233,075	\$ —	\$ —
Funded status of the plans	\$ (71,557)	\$ (103,084)	\$ (7,370)	\$ (8,164)
Amounts recognized in the consolidated balance sheets:				
Accrued expenses (current)	\$ 181	\$ 181	\$ 478	\$ 481
Pension and other postretirement benefit obligations, net	71,376	102,903	6,892	7,683
Net amount recognized	\$ 71,557	\$ 103,084	\$ 7,370	\$ 8,164

The following table sets forth the assumptions used in accounting for the pension and other post-retirement benefits, and the components of net periodic benefit cost:

(In thousands, except percentages)	Pension Benefits			Other Post-Retirement Benefits		
	2021	2020	2019	2021	2020	2019
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	2.90 %	2.57 %	3.27 %	2.86 %	2.54 %	3.25 %
Expected long-term return on plan assets	3.05 %	5.00 %	5.00 %	n/a	n/a	n/a
Weighted-average assumptions used to determine net periodic benefit cost:						
Discount rate	2.57 %	3.27 %	4.40 %	2.54 %	3.25 %	4.37 %
Expected long-term return on plan assets	5.00 %	5.00 %	6.00 %	n/a	n/a	n/a
Components of net periodic benefit cost:						
Service cost	\$ —	\$ —	\$ —	\$ 21	\$ 29	\$ 26
Interest cost	8,398	10,156	12,222	195	243	290
Expected return on plan assets	(11,316)	(11,004)	(13,528)	—	—	—
Amortization of prior service costs and gains or losses	17,003	15,494	10,891	(141)	(198)	(258)
Net periodic benefit cost	\$ 14,085	\$ 14,646	\$ 9,585	\$ 75	\$ 74	\$ 58

Net periodic benefit cost is determined using assumptions at the beginning of each year. Funded status is determined using assumptions at the end of each year. The amount of the accumulated benefit obligation is the same as the projected benefit obligation. At December 31, 2021, the effect of a 1% change in the health care cost trend rate assumptions would not impact the post-retirement obligation.

Expected benefit payments over the next five years and in the aggregate for 2027—2031 are as follows:

(In thousands)	Pension Benefits	Other Post-Retirement Benefits
2022	\$ 18,256	\$ 478
2023	18,380	472
2024	18,591	465
2025	18,615	456
2026	18,574	447
2027—2031	89,722	2,081

The average remaining duration of benefit payments for the pension plan is about 11.1 years.

The pre-tax amounts recorded in 2021, 2020 and 2019 in accumulated other comprehensive income consist of:

(In thousands)	Pension			Other Post-Retirement		
	2021	2020	2019	2021	2020	2019
Net actuarial (gain) loss	\$ 109,893	\$ 150,267	\$ 150,047	\$ (320)	\$ 86	\$ (824)

Pension expense is expected to be \$13.9 million in 2022. The amounts in accumulated other comprehensive income, before related deferred income taxes, that are expected to be recognized as components of net periodic cost during 2022 are \$13.2 million of cost for the pension plan and \$0.1 million of benefit for other post-retirement plans.

The percentage composition of assets held by pension plans at December 31, 2021, 2020 and 2019 are as follows:

	% Composition of Plan Assets at December 31,		
	2021	2020	2019
Pension plans:			
Fixed income securities	25.3 %	7.7 %	8.7 %
Large/mid-capitalization equity securities	28.1	27.1	21.3
Small-capitalization equity securities	6.8	8.6	7.8
International and emerging market equity securities	19.9	20.6	19.7
Total equity securities	54.8	56.3	48.8
Private equity and hedge funds	10.4	12.1	35.0
Cash and cash equivalents	2.8	17.5	1.4
Other assets	6.7	6.4	6.1
Total	100.0 %	100.0 %	100.0 %

Prior to commencing plans to terminate and settle the frozen defined benefit pension plan, the Company's primary investment objective was to maximize total return with a strong emphasis on the preservation of capital, which it expected to achieve through a diversified portfolio with both a higher risk profile and anticipated long-term returns via fixed income securities, equity securities, hedge funds and private equity funds. Concurrent with the Company's decision to commence the termination and settlement of the plan, the Company began transitioning to a liability-driven investment strategy aimed at reducing funded status volatility. The new strategy contemplates an increase of the fixed income securities allocation from 25.3% as of December 31, 2021 to an ultimate target of 100% and decreases to the asset allocations currently invested in equity securities, commodity funds, private equity and hedge funds, from 71.9% to zero over the next 18 months.

The expected long-term rate of return developed through consultation with the Company's investment advisors as of December 31, 2021 contemplates the impact of this strategy which included consideration of several factors, including prevailing and planned strategic asset allocations, current and expected future market conditions, inflation-adjusted historical returns, volatilities, risk premiums and managed asset premiums.

Estimates of the fair value of assets held by the Company's pension plan are provided by unaffiliated third parties. Investments in private equity, hedge funds and certain international equity securities are measured at net asset value, which is a practical expedient for measuring fair value. These assets are therefore excluded from the fair value hierarchy for each of the years presented. At December 31, 2021 and 2020, the pension plan assets are categorized by level within the fair value measurement hierarchy as follows:

(In thousands)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Balances at December 31, 2021				
Cash and cash equivalents	\$ 6,943	\$ 6,943	\$ —	\$ —
Large/mid-capitalization equity securities	68,739	68,739	—	—
Small-capitalization equity securities	16,588	16,588	—	—
International and emerging market equity securities	25,174	25,174	—	—
Fixed income securities	61,845	9,306	52,539	—
Contracts with insurance companies	9,438	—	—	9,438
Other assets ^(a)	6,868	6,868	—	—
Total plan assets at fair value	\$ 195,595	\$ 133,618	\$ 52,539	\$ 9,438
Investments measured at net asset value	49,017			
Total plan assets, December 31, 2021	\$ 244,612			
Balances at December 31, 2020				
Cash and cash equivalents	\$ 40,890	\$ 40,890	\$ —	\$ —
Large/mid-capitalization equity securities	63,146	63,146	—	—
Small-capitalization equity securities	19,932	19,932	—	—
International and emerging market equity securities	24,325	24,325	—	—
Fixed income securities	18,008	6,690	11,318	—
Contracts with insurance companies	9,118	—	—	9,118
Other assets ^(a)	5,629	5,629	—	—
Total plan assets at fair value	\$ 181,048	\$ 160,612	\$ 11,318	\$ 9,118
Investments measured at net asset value	52,027			
Total plan assets, December 31, 2020	\$ 233,075			

(a) Represents investments in certain commodity funds measured using quoted market prices.

9. OTHER INCOME (EXPENSE), NET

Other income (expense), net consists of the following:

(In thousands)	2021	2020	2019
Gain (loss) on investment in kaléo ^(a)	\$ 12,780	\$ (60,900)	\$ 28,482
One-time tax credit in Brazil for unemployment/social security insurance non-income taxes resulting from a favorable decision by Brazil's Supreme Court regarding the calculation of such tax	8,486	—	—
Transition service fees, net of corporate costs associated with the divested Personal Care business	297	(851)	—
COVID-19-related expenses ^(b)	(624)	(2,231)	—
Loss on sale of Bright View Technologies	—	(2,299)	—
Write-down of investment in Harbinger Capital Partners Special Situations Fund ^(c)	(517)	—	—
Gain associated with the sale of Lake Zurich manufacturing facility assets	378	—	—
Other	(424)	(1,013)	(111)
Total	\$ 20,376	\$ (67,294)	\$ 28,371

(a) The gain in 2021 includes a \$0.3 million dividend received from kaléo in the first quarter of 2021. The gain in 2019 includes a \$17.6 million dividend received from kaléo.

(b) Costs associated with operating under COVID-19 conditions include employee overtime expenses associated with absenteeism, personal protective equipment supplies and facility maintenance.

(c) Represents the unrealized loss on the Company's investment in Harbinger Capital Partners Special Situations Funds L.P. that had a fair value of \$0.2 million, \$0.7 million and \$1.1 million as of December 31, 2021, 2020 and 2019, respectively, reported in "Other assets" in the consolidated balance sheet.

In May 2021, the Brazil Supreme Court ruled in a leading case related to the amount of Brazilian value-added tax to exclude from the calculation of unemployment/social security insurance non-income taxes ("PIS/COFINS"). As a result, in the second quarter of 2021, the Company recorded a pre-tax gain of \$8.5 million for certain excess PIS/COFINS paid from 2003 to 2021, that included applicable interest, which the Company applied to required Brazilian federal tax payments during 2021. The pre-tax gain was recorded in "Other income (expense), net" in the consolidated statements of income.

10. DERIVATIVES

Tredegar uses derivative financial instruments for the purpose of hedging margin exposure from fixed-price forward sales contracts in Aluminum Extrusions and exposure from currency volatility that exist as part of ongoing business operations (primarily in Flexible Packaging Films). These derivative financial instruments are designated as and qualify as cash flow hedges and are recognized in the consolidated balance sheet at fair value. The fair value of derivative instruments recorded on the consolidated balance sheets are based upon Level 2 inputs. If individual derivative instruments with the same counterparty can be settled on a net basis, the Company records the corresponding derivative fair values as a net asset or net liability.

In the normal course of business, Aluminum Extrusions enters into fixed-price forward sales contracts with certain customers for the future sale of fixed quantities of aluminum extrusions at scheduled intervals. In order to hedge margin exposure created from the fixing of future sales prices relative to volatile raw material (aluminum) costs, Aluminum Extrusions enters into a combination of forward purchase commitments and futures contracts to acquire or hedge aluminum, based on the scheduled purchases for the firm sales commitments. The fixed-price firm sales commitments and related hedging instruments generally have durations of not more than 12 months, and the notional amount of aluminum futures contracts that hedged future purchases of aluminum to meet fixed-price forward sales contract obligations was \$22.1 million (14.9 million pounds of aluminum) at December 31, 2021 and \$12.1 million (13.0 million pounds of aluminum) at December 31, 2020.

The table below summarizes the location and gross amounts of aluminum derivative contract fair values (Level 2) in the consolidated balance sheets as of December 31, 2021 and 2020:

(In thousands)	December 31, 2021		December 31, 2020	
	Balance Sheet Account	Fair Value	Balance Sheet Account	Fair Value
Derivatives Designated as Hedging Instruments				
Asset derivatives:				
Aluminum futures contracts	Prepaid expenses & other	\$ 2,085	Prepaid expenses & other	\$ 1,560
Liability derivatives:				
Liability derivatives:				
Aluminum futures contracts	Accrued expenses	(119)	Accrued expenses	(22)
Net asset (liability)		\$ 1,966		\$ 1,538

In the event that a counterparty to an aluminum fixed-price forward sales contract chooses not to take delivery of its aluminum extrusions, the customer is contractually obligated to compensate Aluminum Extrusions for any losses on the related aluminum futures and/or forward contracts through the date of cancellation.

The Company's earnings are exposed to foreign currency exchange risk primarily through the translation of the financial statements of subsidiaries that have a functional currency other than the U.S. Dollar. The Company estimates that the net mismatch translation exposure for the Flexible Packaging Film's business unit in Brazil ("Terphane Ltda.") of its sales and raw materials quoted or priced in U.S. Dollars and its variable conversion, fixed conversion and sales, general and administrative costs (before depreciation and amortization) quoted or priced in Brazilian Real is annual net costs of R\$150 million Brazilian Real ("R\$").

Terphane Ltda. has the following outstanding foreign exchange average forward rate contracts to purchase Brazilian Real and sell U.S. Dollars:

USD Notional Amount (000s)	Average Forward Rate Contracted on USD/BRL	R\$ Equivalent Amount (000s)	Applicable Month	Estimated % of Terphane Ltda. R\$ Operating Cost Exposure Hedged
\$1,677	5.3360	R\$8,948	Jan-22	72%
\$1,751	5.3631	R\$9,391	Feb-22	75%
\$1,662	5.3905	R\$8,959	Mar-22	72%
\$1,615	5.4247	R\$8,761	Apr-22	70%
\$1,647	5.4545	R\$8,984	May-22	72%
\$1,596	5.4890	R\$8,760	Jun-22	70%
\$1,719	5.5200	R\$9,489	Jul-22	76%
\$1,708	5.5560	R\$9,490	Aug-22	76%
\$1,780	5.5915	R\$9,953	Sep-22	80%
\$1,793	5.6264	R\$10,088	Oct-22	81%
\$1,784	5.6597	R\$10,097	Nov-22	81%
\$1,659	5.6962	R\$9,450	Dec-22	76%
\$20,391	5.5108	R\$112,370		75%

These foreign currency exchange contracts have been designated and qualify as cash flow hedges of Terphane Ltda.'s forecasted sales to customers quoted or priced in U.S. Dollars over that period. By changing the currency risk associated with these U.S. Dollar sales, the derivatives have the effect of offsetting operating costs quoted or priced in Brazilian Real and decreasing the net exposure to Brazilian Real in the consolidated statements of income.

The table below summarizes the location and gross amounts of foreign currency forward contract fair values (Level 2) in the consolidated balance sheets as of December 31, 2021 and 2020:

(In thousands)	December 31, 2021		December 31, 2020	
	Balance Sheet Account	Fair Value	Balance Sheet Account	Fair Value
Derivatives Designated as Hedging Instruments				
Asset derivatives:	Prepaid expenses and other	\$ —	Prepaid expenses and other	\$ 853
Foreign currency forward contracts				
Liability derivatives:	Accrued expenses	(1,255)	Accrued expenses	(466)
Foreign currency forward contracts				
Net asset (liability)		\$ (1,255)		\$ 387

These derivative contracts involve elements of market risk that are not reflected on the consolidated balance sheet, including the risk of dealing with counterparties and their ability to meet the terms of the contracts. The counterparties to any forward purchase commitments are major aluminum brokers and suppliers, and the counterparties to any aluminum futures contracts are major financial institutions. Fixed-price forward sales contracts are only made available to the best and most credit-worthy customers. The counterparties to the Company's foreign currency cash flow hedge contracts are major financial institutions.

The pretax effect on net income (loss) from continuing operations and other comprehensive income (loss) of derivative instruments classified as cash flow hedges and described in the previous paragraphs for years ended December 31, 2021, 2020, and 2019 is summarized in the tables below:

(In thousands)	Cash Flow Derivative Hedges		
	Aluminum Futures Contracts		
	2021	2020	2019
Years Ended December 31,			
Amount of pre-tax gain (loss) recognized in other comprehensive income	\$ 6,215	\$ 74	\$ (2,359)
Location of gain (loss) reclassified from accumulated other comprehensive income into net income (effective portion)	Cost of goods sold	Cost of goods sold	Cost of goods sold
Amount of pre-tax gain (loss) reclassified from accumulated other comprehensive income to net income (effective portion)	\$ 5,787	\$ (2,717)	\$ (2,736)

(In thousands)	Cash Flow Derivative Hedges					
	Foreign Currency Forward Contracts					
	2021		2020		2019	
Years Ended December 31,						
Amount of pre-tax gain (loss) recognized in other comprehensive income	\$ —	\$ (2,415)	\$ —	\$ (4,437)	\$ —	\$ (856)
Location of gain (loss) reclassified from accumulated other comprehensive income into net income (effective portion)	Cost of goods sold	Selling, general & admin	Cost of goods sold	Selling, general & admin	Cost of goods sold	Selling, general & admin
Amount of pre-tax gain (loss) reclassified from accumulated other comprehensive income to net income (effective portion)	\$ 63	\$ (337)	\$ 62	\$ (6,069)	\$ 62	\$ (904)

As of December 31, 2021, the Company expects \$0.7 million of unrealized after-tax net gains on aluminum and foreign currency derivative contracts reported in accumulated other comprehensive income (loss) to be reclassified to earnings within the next 12 months. For the years ended December 31, 2021, 2020 and 2019, net gains or losses realized, from previously unrealized net gains or losses on hedges that had been discontinued, were not material.

11. STOCK OPTION AND STOCK AWARD PLANS

As of December 31, 2021, the Company had one stock-based compensation plan that permits the grants of stock options, stock appreciation rights ("SARs"), stock, restricted stock, and stock unit awards. Awards available for grant totaled 910,420 shares at December 31, 2021. Stock options may be granted to purchase a specified number of shares of common stock at a price no lower than the fair market value on the date of grant and for a term not to exceed 10 years. Stock options granted by the Company in 2021, 2020 and 2019 vest after 2 years and have a 7-year life or vest after 3 years and have a 5-year life. Stock options exercisable totaled 1,762,190 and 1,287,792 shares at December 31, 2021 and 2020, respectively.

On December 1, 2020, Tredegar's Board of Directors declared a special cash dividend of \$200 million, or \$5.97 per share, on the Company's common stock (the "Special Dividend"). The Special Dividend was payable on December 18, 2020 and had

an ex-dividend date of December 21, 2020. All stock option awards that were outstanding at the time of the Special Dividend were modified pursuant to the nondiscretionary anti-dilution provisions in the related stock-based compensation plan. SARs that were outstanding at the time of the Special Dividend were also modified pursuant to the nondiscretionary anti-dilution provisions in the related SARs grant agreements. The modifications included increasing the number of outstanding stock options and SARs as well as reducing the exercise prices of all outstanding stock options and SARs. The modification did not result in additional stock-based compensation expense. No other terms or conditions of outstanding awards were modified.

A summary of stock options outstanding at December 31, 2021, 2020 and 2019, and changes during those years, is presented below:

	Number of Options	Option Exercise Price/Share			Weighted Average
			Range		
Outstanding at January 1, 2019	890,116	\$ 15.65	to	\$ 24.84	\$ 19.69
Granted	758,287	18.48	to	18.48	18.48
Forfeited and expired	(10,000)	19.40	to	19.40	19.40
Exercised	(9,500)	19.40	to	19.40	19.40
Outstanding at December 31, 2019	1,628,903	15.65	to	24.84	19.13
Granted	638,074	10.75	to	14.62	11.90
Modification for special cash dividend ^(a)	701,535	10.75	to	14.62	11.90
Forfeited and expired ^(a)	(141,074)	10.75	to	24.84	11.87
Outstanding at December 31, 2020 ^(a)	2,827,438	10.75	to	22.49	13.55
Granted	388,822	16.37	to	16.37	16.37
Forfeited and expired	(22,611)	14.47	to	19.64	18.14
Exercised	(67,705)	10.75	to	17.29	13.51
Outstanding at December 31, 2021	3,125,944	\$ 10.75	to	\$ 22.49	\$ 13.82

(a) The option exercise price per share reflects the reduction to the exercise prices of outstanding stock options impacted by the modification due to the anti-dilution provisions in the stock-based compensation plan.

The assumptions used in the Black-Scholes options-pricing model for valuing Tredegar stock options originally granted in 2021, 2020 and 2019, and the related estimated fair values at the date of grant, were as follows:

	2021	2020	2019
Dividend yield	2.6 %	2.5 %	2.4 %
Weighted average volatility percentage	48.3 %	43.8 %	38.3 %
Weighted average risk-free interest rate	0.9 %	0.8 %	2.4 %
Holding period (years)	5	5	5
Weighted average exercise price at date of grant (also weighted average market price at date of grant) ^(a)	\$ 16.37	\$ 14.41	\$ 18.48
Estimated weighted average fair value of options per share at date of grant	\$ 5.57	\$ 4.44	\$ 5.43
Total estimated fair value of stock options granted (in thousands)	\$ 2,165	\$ 2,833	\$ 4,117

(a) In December 2020, the weighted average exercise price for outstanding stock option awards granted in 2020 and 2019 were modified to \$10.75 and \$13.78, respectively. As the anti-dilution provisions in the stock-based compensation plan were structured to equitably adjust the award's fair value before and after the modification, there is no resulting incremental fair value.

The dividend yield is the actual dividend yield on Tredegar's common stock at the date of grant, which the Company believes is a reasonable estimate of the expected yield during the holding period. The expected volatility is based on the historical volatility of Tredegar's common stock using a sequential period of historical data equal to the expected holding period of the option. The Company has no reason to believe that future volatility for this period is likely to differ from the past. The assumed risk-free interest rate is based on observed interest rates for U.S. Treasury debt securities appropriate for the expected holding period.

The following table summarizes additional information about stock options outstanding and exercisable at December 31, 2021:

Options Outstanding at December 31, 2021					Options Exercisable at December 31, 2021			
Range of Exercise Prices		Shares	Weighted Average		Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value	
			Remaining Contractual Life	Exercise Price				Aggregate Intrinsic Value
\$ 10.75	to \$ 16.37	2,953,052	4.4 years	\$ 13.48	\$ 792,082	1,589,298	\$ 13.78	\$ 41,076
17.29	to 25.94	172,892	1.6 years	19.71	—	172,892	19.71	—
Total		3,125,944	4.2 years	\$ 13.82	\$ 792,082	1,762,190	\$ 14.36	\$ 41,076

The total intrinsic value of stock options exercised is \$0.2 million in 2021 and \$0.1 million in 2019. There were no stock options exercised in 2020. The grant-date fair value of stock option-based awards vested was \$3.5 million, \$3.0 million, and \$0.5 million in 2021, 2020, and 2019, respectively. As of December 31, 2021, the unrecognized compensation cost for continuing operations related to stock option-based awards was \$1.7 million. This cost is expected to be recognized over the remaining weighted average period of 0.6 years. Commencing in 2019, stock option award grants include a retirement provision that allow for the immediate vesting of options held by a participant that ceases to provide service, including service as a member of the board of directors, with the Company, subsequent to reaching the age of 65. As a result of this provision, the Company recognized accelerated stock compensation expense for continuing operations of \$0.1 million and \$1.3 million in 2020 and 2019, respectively. There was no accelerated stock compensation expense in 2021.

Restricted stock grants ordinarily vest three years from the date of grant based upon continued employment. The fair value of restricted stock awards is estimated as of the grant date using the closing stock price on that date. Stock unit awards vest upon the achievement of certain performance targets. The following table summarizes additional information about unvested restricted stock outstanding at December 31, 2021, 2020 and 2019:

	Unvested Restricted Stock			Maximum Unvested Restricted Stock Units Issuable Upon Satisfaction of Certain Performance Criteria		
	Number of Shares	Weighted Avg. Grant Date Fair Value/Share	Grant Date Fair Value (In thousands)	Number of Shares	Weighted Avg. Grant Date Fair Value/Share	Grant Date Fair Value (In thousands)
Outstanding at January 1, 2019	244,736	\$ 16.20	\$ 3,965	184,709	\$ 16.97	\$ 3,134
Granted	185,422	18.46	3,423	57,442	18.34	1,053
Vested	(117,834)	14.76	(1,739)	(69,926)	10.96	(766)
Forfeited	(26,389)	16.11	(425)	(24,562)	11.51	(283)
Outstanding at December 31, 2019	285,935	18.27	5,224	147,663	21.25	3,138
Granted	155,138	14.55	2,257	34,275	15.25	523
Vested	(148,709)	17.39	(2,586)	(37,370)	17.38	(649)
Forfeited	(57,385)	17.00	(976)	(32,066)	17.36	(557)
Outstanding at December 31, 2020	234,979	16.68	3,919	112,502	21.82	2,455
Granted	200,073	15.63	3,127	14,669	15.24	224
Vested	(87,636)	15.78	(1,383)	(73,930)	17.17	(1,269)
Forfeited	(11,616)	16.38	(190)	(2,523)	17.63	(44)
Outstanding at December 31, 2021	335,800	\$ 16.30	\$ 5,473	50,718	\$ 17.63	\$ 1,366

As of December 31, 2021, the unrecognized compensation cost for continuing operations related to non-vested restricted stock awards was \$2.6 million. This cost is expected to be recognized over the remaining weighted average period of 1.5 years.

SARs granted by the Company in 2021 and 2020 vest after 2 years and have a 7-year life. No SARs were granted prior to January 1, 2020 since 1992. SARs may be settled in cash upon exercise and therefore are classified as liabilities and included in accrued expenses in the consolidated balance sheet. The fair value of these liability awards is remeasured at each reporting period until the date of settlement. Increases and decreases in stock-based compensation expense is recognized over the vesting period, or immediately, for vested awards.

A summary of SARs outstanding at December 31, 2021 and 2020, and changes during those years, is presented below:

	Number of SARs	Exercise Price/Share				Weighted Average
		Range				
Outstanding at January 1, 2020	—	\$	—	to	\$	—
Granted ^(a)	387,252		10.75	to	19.64	11.60
Modification for special cash dividend	71,402		10.75	to	19.64	11.60
Forfeited and expired	(82,214)		10.75	to	19.64	11.39
Outstanding at December 31, 2020	376,440		10.75	to	19.64	11.64
Granted	164,464		16.37	to	16.37	16.37
Forfeited and expired	(10,043)		10.75	to	16.37	13.01
Exercised	(9,260)		10.75	to	15.25	13.87
Outstanding at December 31, 2021	521,601	\$	10.75	to	\$ 16.37	\$ 13.55

(a) The SARs exercise price per share reflects the reduction to the exercise prices of outstanding SARs as a result of the modification to the awards pursuant to the nondiscretionary anti-dilution provisions in the related SARs grant agreements.

The grant-date fair value of SARs awards vested was \$0.1 million and \$0.6 million in 2021 and 2020, respectively. As of December 31, 2021, the unrecognized compensation cost for continuing operations was \$0.4 million. This cost is expected to be recognized over the remaining weighted average period of 0.6 years.

12. INCOME TAXES

Income (loss) from continuing operations before income taxes and income tax expense (benefit) for continuing operations are as follows:

(In thousands)	2021	2020	2019
Income (loss) from continuing operations before income taxes:			
Domestic	\$ 22,885	\$ (58,033)	\$ 52,536
Foreign	44,336	32,987	19,470
Total	\$ 67,221	\$ (25,046)	\$ 72,006
Current income tax expense (benefit):			
Federal	\$ 1,232	\$ 4,777	\$ 7,551
State	764	136	1,558
Foreign	13,521	2,374	579
Total	15,517	7,287	9,688
Deferred income tax expense (benefit):			
Federal	(7,862)	(18,191)	15,298
State	125	(640)	187
Foreign	1,504	3,331	(11,628)
Total	(6,233)	(15,500)	3,857
Total income tax expense (benefit)	\$ 9,284	\$ (8,213)	\$ 13,545

The significant differences between the U.S. federal statutory rate and the effective income tax rate related to continuing operations are as follows:

(In thousands, except percentages)	2021		2020		2019	
	Amount	%	Amount	%	Amount	%
Income tax expense (benefit) at federal statutory rate	\$ 14,116	21.0	\$ (5,260)	21.0	\$ 15,121	21.0
Foreign rate differences	8,269	12.3	4,554	(18.2)	2,247	2.9
Tax on Prodepe tax incentive	2,858	4.3	(801)	3.2	(714)	(1.0)
Foreign currency translation variation on intercompany loans	1,374	2.0	—	—	—	—
Non-deductible other	1,053	1.6	208	(0.8)	637	0.9
State taxes, net of federal income tax benefit	933	1.4	(373)	1.5	1,050	1.5
Tax contingency accruals and tax settlements	202	0.3	(58)	0.2	(2,543)	(3.5)
Foreign derived intangible income deduction	—	—	—	—	(319)	(0.4)
Valuation allowance due to foreign losses and impairments	—	—	—	—	(14,350)	(19.9)
Dividend received deduction net of foreign withholding tax	(109)	(0.2)	(52)	0.2	(1,016)	(1.4)
Changes in estimates related to prior year tax provision	(383)	(0.6)	(2,472)	9.9	(135)	(0.2)
Research and development tax credit	(928)	(1.4)	(633)	2.5	(523)	(0.7)
Valuation allowance for capital loss carryforwards	(5,415)	(8.1)	52	(0.2)	60	0.1
U.S. tax on foreign branch income	(5,667)	(8.4)	1,409	(5.6)	16,029	22.3
Brazilian tax incentive	(7,019)	(10.4)	(4,787)	19.1	(1,999)	(2.8)
Income tax expense (benefit) at effective income tax rate	\$ 9,284	13.8	\$ (8,213)	32.8	\$ 13,545	18.8

Income taxes in 2021 are primarily due to the strong earnings of Terphane Ltda, which are included in Tredegar's U.S. consolidated tax return and, the tax impact of the local statutory tax rates of Tredegar's foreign subsidiaries being higher than the current U.S. tax rate of 21%, the benefit of tax incentives in Brazil and the release of the valuation allowance for capital loss carryforwards.

Income taxes in 2020 were primarily impacted by the tax impact of Terphane Ltda. being included in Tredegar's U.S. consolidated tax return as a foreign branch, the tax impact of the local statutory tax rates of Tredegar's foreign subsidiaries being higher than the current US tax rate of 21%, the benefit of tax incentives in Brazil, and by claims for prior years' U.S. research and development tax credits.

During 2019, due to favorable earnings trends, the Company released a \$12.4 million valuation allowance on the net deferred tax assets of its Brazilian subsidiary Terphane Ltda. Because Terphane Ltda. is taxed as a foreign branch for U.S. tax purposes, Tredegar also recorded a related deferred tax liability of \$12.4 million for the reduction in foreign tax credits that would result from Terphane Ltda. realizing this net deferred tax asset.

Tredegar accrues U.S. federal income taxes on unremitted earnings of all foreign subsidiaries where required. However, due to changes in the taxation of dividends under TCJA, Tredegar will only record U.S. federal income taxes on unremitted earnings of its foreign subsidiaries where Tredegar cannot take steps to eliminate any potential tax on future distributions from its foreign subsidiaries. Because of the accumulation of significant losses related to foreign currency translations at Terphane Ltda., there were no deferred income tax liabilities associated with the U.S. federal income taxes and foreign withholding taxes on Terphane Ltda.'s undistributed earnings as of December 31, 2021 and 2020.

The Brazilian federal statutory income tax rate is a composite of 34.0% (25.0% of income tax and 9.0% of social contribution on income). Terphane's manufacturing facility in Brazil is the beneficiary of certain income tax incentives that allow for a reduction in the statutory Brazilian federal income tax rate levied on the operating profit of its products. These incentives produce a current tax rate of 15.25% for Terphane (6.25% of income tax and 9.0% social contribution on income). The incentives were originally granted for a 10-year period commencing January 1, 2015 and expiring at the end of 2024. Terphane Brazil has been granted an additional three years of tax incentives through the end of 2027. The benefit from the tax incentives was \$7.0 million, \$4.8 million and \$2.0 million in 2021, 2020 and 2019, respectively.

Deferred income tax liabilities and deferred income tax assets at December 31, 2021 and 2020, are as follows:

(In thousands)	2021	2020
Deferred income tax liabilities:		
Amortization of goodwill and identifiable intangibles	\$ 10,215	\$ 9,520
Depreciation	12,902	10,844
Foregone tax credits on foreign branch income	4,796	5,714
Excess of carrying value over tax basis of investment in kaléo	—	4,905
Right-of-use leased assets	2,767	2,979
Other	520	944
Total deferred income tax liabilities	31,200	34,906
Deferred income tax assets:		
Pensions	5,632	25,576
Employee benefits	7,791	9,757
Excess capital losses	1,097	7,462
Inventory	3,775	2,613
Asset write-offs, divestitures and environmental accruals	1,173	2,904
Tax benefit on U.S. federal, state and foreign NOL and credit carryforwards	33,922	18,305
Other	146	275
Lease liabilities	2,977	3,144
Tax basis remaining for installment sale - kaléo	1,092	—
Foreign currency translation gain adjustment	1,970	1,423
Deferred income tax assets before valuation allowance	59,575	71,459
Less: Valuation allowance	12,652	17,485
Total deferred income tax assets	46,923	53,974
Net deferred income tax (assets) liabilities	\$ (15,723)	\$ (19,068)
Amounts recognized in the consolidated balance sheets:		
Deferred income tax assets (noncurrent)	\$ 15,723	\$ 19,068
Deferred income tax liabilities (noncurrent)	—	—
Net deferred income tax assets (liabilities)	\$ 15,723	\$ 19,068

Except as noted below, the Company believes that it is more likely than not that future taxable income will exceed future tax-deductible amounts thereby resulting in the realization of deferred income tax assets. The Company has estimated gross federal, state and foreign tax credits and net operating loss carryforwards of \$33.9 million and \$18.3 million at December 31, 2021 and 2020, respectively. The U.S. federal foreign tax credits will expire between 2027-2031 and the U.S. federal research and development tax credits will expire by 2041. The U.S. state carryforwards expire at different points over the next 20 years.

Valuation allowances of \$9.4 million, \$5.5 million and \$2.5 million at December 31, 2021, 2020 and 2019, respectively, are recorded against the tax benefit on U.S. federal, state and foreign tax credits and net operating loss carryforwards generated by certain foreign and domestic subsidiaries that may not be recoverable in the carryforward period. The valuation allowance for excess capital losses from investments and other related items was \$0.7 million, \$7.1 million and \$1.3 million at December 31, 2021, 2020 and 2019, respectively. The 2021 balance decreased primarily due to utilization of capital losses as a result of the sale of the Company's investment in kaléo. The amount of the deferred income tax asset considered realizable, however, could be adjusted in the near term if estimates of the fair value of certain investments during the carryforward period change. As circumstances and events warrant, allowances will be reversed when it is more likely than not that future taxable income will exceed deductible amounts, thereby resulting in the realization of deferred income tax assets. Valuation allowances of \$2.5 million, \$4.9 million and \$0 million at December 31, 2021, 2020 and 2019, respectively, were recorded against certain deferred state tax assets. In 2019, the Company reversed a \$12.4 million valuation allowance on the net deferred tax assets of its Brazilian subsidiary Terphane Ltda due to favorable earnings trends. Since Terphane Ltda. is taxed as a foreign branch for US tax purposes, Tredegar also recorded a related deferred tax liability of \$12.4 million for the reduction in foreign tax credits that would result from Terphane Ltda. realizing this net deferred tax asset.

A reconciliation of the Company's unrecognized uncertain tax positions since January 1, 2019, is shown below:

(In thousands)	Years Ended December 31,		
	2021	2020	2019
Balance at beginning of period	\$ 628	\$ 881	\$ 3,361
Increase (decrease) due to tax positions taken in:			
Current period	—	12	12
Prior period	40	—	49
Increase (decrease) due to settlements with taxing authorities	—	—	(151)
Reductions due to lapse of statute of limitations	(20)	(265)	(2,390)
Balance at end of period	\$ 648	\$ 628	\$ 881

Additional information related to unrecognized uncertain tax positions since January 1, 2019 is summarized below:

(In thousands)	Years Ended December 31,		
	2021	2020	2019
Gross unrecognized tax benefits on uncertain tax positions (reflected in current income tax, other noncurrent liability accounts, or deferred tax assets in the balance sheet)	\$ 648	\$ 628	\$ 881
Deferred income tax assets related to unrecognized tax benefits on uncertain tax positions (reflected in deferred income tax accounts in the balance sheet)	48	(110)	(163)
Net unrecognized tax benefits on uncertain tax positions, which would impact the effective tax rate if recognized	696	518	718
Interest and penalties accrued on deductions taken relating to uncertain tax positions (approximately \$26, \$2 and \$(144) reflected in income tax expense in the income statement in 2021, 2020 and 2019, respectively, with the balance shown in current income tax and other noncurrent liability accounts in the balance sheet)	133	102	100
Related deferred income tax assets recognized on interest and penalties	(31)	(24)	(23)
Interest and penalties accrued on uncertain tax positions net of related deferred income tax benefits, which would impact the effective tax rate if recognized	102	78	77
Total net unrecognized tax benefits on uncertain tax positions reflected in the balance sheet, which would impact the effective tax rate if recognized	\$ 798	\$ 596	\$ 795

Tredegear, or one of its subsidiaries, files income tax returns in the U.S. federal jurisdiction, various states and jurisdictions outside the U.S. With few exceptions, Tredegear is no longer subject to U.S. federal, state or non-U.S. income tax examinations by tax authorities for years before 2018. The Company anticipates that it is reasonably possible that Federal and state income tax audits or statutes may settle or close within the next 12 months, which could result in the recognition of up to approximately \$0.5 million of the balance of unrecognized tax positions, including any payments that may be made.

13. BUSINESS SEGMENTS

The Company's business segments are Aluminum Extrusions, PE Films and Flexible Packaging Films. Aluminum Extrusions, also referred to as Bonnell Aluminum, produces high-quality, soft-alloy and medium-strength custom fabricated and finished aluminum extrusions for the building and construction, automotive and transportation, consumer durables, machinery and equipment, electrical and renewable energy, and distribution markets. PE Films is composed of surface protection films, polyethylene overwrap films and films for other markets. Flexible Packaging Films is comprised of the Company's polyester films business, Terphane Holdings LLC ("Terphane").

The Company's reportable segments are based on its method of internal reporting, which is generally segregated by differences in products. Accounting standards for presentation of segments require an approach based on the way the Company organizes the segments for making operating decisions and how the chief operating decision maker ("CODM") assesses performance. EBITDA from ongoing operations is the key profitability measure used by the CODM (Tredegear's President and Chief Executive Officer) for purposes of assessing financial performance. The Company uses sales less freight ("net sales") from continuing operations as its measure of revenues from external customers at the segment level. This measure is separately included in the financial information regularly provided to the CODM.

Information by business segment and geographic area for the last three years is provided in the segment tables below. There were no accounting transactions between segments and no allocations to segments.

Net Sales						
(In thousands)	2021		2020		2019	
Aluminum Extrusions	\$	539,325	\$	455,711	\$	529,602
PE Films		118,920		139,288		133,807
Flexible Packaging Films		139,978		134,605		133,935
Total net sales		798,223		729,604		797,344
Add back freight		28,232		25,686		28,980
Sales as shown in consolidated statements of income	\$	826,455	\$	755,290	\$	826,324

Refer to Notes to Financial Tables that follow these tables.

EBITDA from Ongoing Operations						
(In thousands)	2021		2020		2019	
Aluminum Extrusions:						
Ongoing operations:						
EBITDA	\$	55,948	\$	55,137	\$	65,683
Depreciation & amortization (d)		(16,272)		(17,403)		(16,719)
EBIT		39,676		37,734		48,964
Plant shutdowns, asset impairments, restructurings and other (a)		3,237		(3,506)		(561)
Goodwill impairment charge		—		(13,696)		—
Trade name accelerated amortization (d)		—		—		(10,040)
PE Films:						
Ongoing operations:						
EBITDA		27,694		45,107		41,133
Depreciation & amortization		(6,263)		(6,762)		(5,860)
EBIT		21,431		38,345		35,273
Plant shutdowns, asset impairments, restructurings and other (a)		(371)		(1,974)		(733)
Flexible Packaging Films:						
Ongoing operations:						
EBITDA		31,684		30,645		14,737
Depreciation & amortization		(1,988)		(1,761)		(1,517)
EBIT		29,696		28,884		13,220
Plant shutdowns, asset impairments, restructurings and other (a)		8,439		(18)		—
Total		102,108		85,769		86,123
Interest income		73		44		66
Interest expense		3,386		2,587		4,051
Gain (loss) on investment in kaléo (a)		12,780		(60,900)		28,482
Loss on sale of Bright View (f)		—		(2,299)		—
Stock option-based compensation expense		2,495		2,161		4,132
Corporate expenses, net (a)		41,859		42,912		34,482
Income (loss) from continuing operations before income taxes		67,221		(25,046)		72,006
Income tax expense (benefit) (a)		9,284		(8,213)		13,545
Income (loss) from continuing operations		57,937		(16,833)		58,461
Income (loss) from discontinued operations, net of tax (a)		(111)		(58,611)		(10,202)
Net income (loss)	\$	57,826	\$	(75,444)	\$	48,259

Refer to Notes to Financial Tables that follow these tables.

Identifiable Assets

(In thousands)	2021		2020	
Aluminum Extrusions	\$	280,521	\$	244,560
PE Films		113,613		119,013
Flexible Packaging Films		75,269		66,453
Subtotal		469,403		430,026
General corporate		23,482		71,508
Cash and cash equivalents (b)		30,521		11,846
Discontinued operations		178		1,490
Total	\$	523,584	\$	514,870

(In thousands)	Depreciation and Amortization			Capital Expenditures		
	2021	2020	2019	2021	2020	2019
Aluminum Extrusions	\$ 15,326	\$ 17,403	\$ 26,759	\$ 18,914	\$ 10,260	\$ 17,855
PE Films	6,263	6,762	5,860	2,997	6,024	8,567
Flexible Packaging Films	1,988	1,761	1,517	5,603	4,959	8,866
Subtotal	23,577	25,926	34,136	27,514	21,243	35,288
General corporate (e)	207	520	186	(153)	200	223
Discontinued operations	—	5,511	9,962	—	1,912	15,353
Total	\$ 23,784	\$ 31,957	\$ 44,284	\$ 27,361	\$ 23,355	\$ 50,864

Net Sales by Geographic Area (c)

(In thousands)	2021		2020		2019	
United States	\$	614,987	\$	530,243	\$	593,599
Exports from the United States to:						
Asia		59,242		80,217		82,342
Canada		17,776		18,024		15,022
Europe		4,489		5,440		5,752
Latin America		4,937		2,169		4,135
Operations outside the United States:						
Brazil		96,792		93,511		96,274
China		—		—		220
Total	\$	798,223	\$	729,604	\$	797,344

(In thousands)	Identifiable Assets by Geographic Area (c)		Property, Plant & Equipment, Net by Geographic Area (c)	
	2021	2020	2021	2020
United States	\$ 398,749	\$ 363,106	\$ 135,310	\$ 132,268
Operations outside the United States:				
Brazil	54,299	49,157	18,615	15,588
China	16,355	17,763	14,889	16,245
General corporate	23,482	71,508	1,567	2,444
Cash and cash equivalents (b)	30,521	11,846	n/a	n/a
Discontinued operations	178	1,490	—	—
Total	\$ 523,584	\$ 514,870	\$ 170,381	\$ 166,545

Refer to Notes to Financial Tables that follow these tables.

The Company's facilities in Pottsville, PA ("PV") and Guangzhou, China ("GZ") have a tolling arrangement whereby certain surface protection films are manufactured in GZ for a fee with raw materials supplied from PV that are then shipped by GZ directly to customers principally in the Asian market but paid by customers directly to PV. Amounts associated with this intercompany tolling arrangement are reported in the table above as export sales from the U.S. to Asia, and include net sales of \$32.7 million in 2021, \$35.1 million in 2020 and \$32.1 million in 2019.

(In thousands)	<i>Net Sales by Product Group</i>		
	2021	2020	2019
Aluminum Extrusions:			
Nonresidential building & construction	\$ 269,252	\$ 253,126	\$ 272,729
Consumer durables	53,578	44,167	57,607
Automotive	43,256	35,895	46,461
Machinery & equipment	42,721	30,649	38,657
Distribution	45,639	28,339	34,753
Residential building & construction	52,236	40,049	43,554
Electrical	32,643	23,486	35,841
Subtotal	539,325	455,711	529,602
PE Films:			
Surface protection films	88,436	109,097	103,893
Packaging	30,484	22,700	22,542
LED-based products	—	7,491	7,372
Subtotal	118,920	139,288	133,807
Flexible Packaging Films	139,978	134,605	133,935
Total	\$ 798,223	\$ 729,604	\$ 797,344

- (a) See Notes 1, 9, 15, 16 and 17 for more information on losses associated with plant shutdowns, asset impairments and restructurings, unusual items, gains or losses from sale of assets, gains or losses on an investment accounted for under the fair value method and other items.
- (b) Cash and cash equivalents includes funds held in locations outside the U.S. of \$16.4 million and \$9.4 million at December 31, 2021 and 2020, respectively.
- (c) Information on exports and foreign operations are provided on the previous page. Export sales relate almost entirely to PE Films. Operations in China relate to PE Films. Operations in Brazil relate to Flexible Packaging Films.
- (d) Depreciation and amortization for Aluminum Extrusions in 2019 excludes \$10.0 million for accelerated amortization of trade names as a result of a rebranding initiative (see Note 5 for more information)
- (e) Corporate depreciation and amortization are included in Corporate expenses, net, on the EBITDA from ongoing operations table above.
- (f) In December 2020, the Company completed the sale of Bright View. See Note 15 for more details.

14. SAVINGS PLAN

Tredegar has a savings plan that allows eligible employees to voluntarily contribute a percentage of their compensation, up to Internal Revenue Service ("IRS") limitations. The provisions of the savings plan provided the following benefits for salaried and certain hourly employees:

- The Company makes matching contributions to the savings plan of \$1 for every \$1 an employee contributes per pay period up to a maximum of 5% of eligible compensation.
- The savings plan includes immediate vesting of matching contributions and automatic enrollment at 3% of eligible compensation unless the employee opts out or elects a different percentage.

The Company also has a non-qualified plan that restores matching benefits for employees suspended from the savings plan due to certain limitations imposed by income tax regulations ("restoration plan"). Charges recognized for these plans were \$3.3 million in 2021, \$4.0 million in 2020 and \$3.9 million in 2019. The Company's liability under the restoration plan was \$0.7 million at December 31, 2021 (consisting of 56,570 phantom shares of common stock) and \$1.0 million at December 31, 2020 (consisting of 61,394 phantom shares of common stock) and valued at the closing market price on those dates.

The Tredegar Corporation Benefits Plan Trust (the "Trust") purchased 7,200 shares of the Company's common stock in 1998 for \$0.2 million and 46,671 shares of its common stock in 1997 for \$1.0 million, which were intended as a hedge against the phantom shares held in the restoration plan. There have been no shares purchased since 1998 except for re-invested dividends. The cost of the shares held by the Trust is shown as a reduction to shareholders' equity in the consolidated balance sheets.

15. DIVESTITURES AND ASSETS HELD FOR SALE

Divestitures

Personal Care Films

In 2020, the Company completed the sale of Personal Care Films for an aggregate purchase price of \$60.5 million, subject to customary adjustments. The Company agreed to provide certain transition services related to finance, human resources and information technology (“IT”) that ended during the second quarter of 2021, resulting in final cash proceeds of \$64.1 million. Personal Care Films was previously reported in the PE Films segment.

The following table summarizes the financial results of discontinued operations reflected in the Consolidated Statements of Income for the year ended December 31, 2021, 2020 and 2019:

(In thousands)	Years Ended December 31		
	2021	2020	2019
Revenues and other items:			
Sales	\$ —	\$ 110,246	\$ 146,034
Other income (expense), net	—	(333)	6,424
	—	109,913	152,458
Costs and expenses:			
Cost of goods sold	—	92,079	126,371
Freight	—	5,229	7,083
Selling, general and administrative	739	16,824	17,754
Research and development	—	8,863	11,743
Asset impairments and costs associated with exit and disposal activities, net of adjustments	—	1,529	3,341
Adjustment to the fair value estimates used in the disposal of Personal Care Films ^(a)	(1,118)	—	—
Loss on sale of business	—	50,027	—
Total	(379)	174,551	166,292
Income (loss) from discontinued operations before income taxes	379	(64,638)	(13,834)
Income tax expense (benefit)	490	(6,027)	(3,632)
Income (loss) from discontinued operations, net of tax	\$ (111)	\$ (58,611)	\$ (10,202)

(a) Represents a net increase to the estimated fair value of Personal Care Films primarily due to lower costs associated with IT transition-related services to provide the seller developed assets, which did not exist at the time of the sale, to support the seller’s IT infrastructure.

The assets and liabilities of the discontinued operations reflected in the Consolidated Balance Sheets as of December 31, 2021 and 2020, respectively were as follows:

(In thousands)	December 31	
	2021	2020
Assets		
Prepaid expenses and other ^(a)	\$ 178	\$ 1,339
Other assets	—	151
Total assets of discontinued operations	\$ 178	\$ 1,490
Liabilities		
Accrued expenses ^(a)	\$ 193	\$ 7,521

(a) The consolidated balance sheet of discontinued operations as of December 31, 2021 includes \$0.2 million of other receivables related to the settlement of customary post-closing adjustments and other miscellaneous accrued expenses of \$0.2 million. The consolidated balance sheet of discontinued operations as of December 31, 2020 includes \$0.4 million of other receivables related to the settlement of customary post-closing adjustments, deferred assets of \$0.9 million and deferred obligations of \$5.3 million related to transition services, accrued severance of \$2.1 million, and other miscellaneous accrued expenses of \$0.2 million.

The following table provides significant operating and investing cash flow information for discontinued operations:

(In thousands)	Year Ended December 31,		
	2021	2020	2019
Operating activities:			
Depreciation and amortization	\$ —	\$ 5,511	\$ 9,962
Gain from the sale of the Shanghai manufacturing facility assets	—	—	(6,316)
Loss on sale of Personal Care Films	—	50,027	—
Other	(1,118)	—	—
Total	(1,118)	55,538	3,646
Investing activities:			
Net proceeds on sale of Personal Care Films	\$ —	\$ 55,115	\$ —
Proceeds from the sale of the Shanghai manufacturing facility assets	—	—	10,936
Capital expenditures	—	(1,912)	(15,353)
Total	\$ —	\$ 53,203	\$ (4,417)

Bright View

In December 2020, the Company entered into a definitive agreement and completed the sale of Bright View, which resulted in the recognition of a pre-tax loss of \$2.3 million (\$1.8 million after-tax) included in "Other income (expense), net" in the consolidated statements of income for the year ended December 31, 2020. The sale did not represent a strategic shift nor did it have a major effect on the Company's historical and ongoing operations, thus all financial information for Bright View has been presented as continuing operations within the PE Films segment.

Assets Held For Sale

In July 2019, the Company committed to a plan to close its manufacturing facility in Lake Zurich, Illinois, which historically was reported within the personal care component of its PE Films segment. As of December 31, 2020, the disposal group carrying value of \$4.6 million was reported in "Prepaid expenses and other" in the consolidated balance sheet as the held for sale criteria was met. During the third quarter of 2021, the Company completed the sale of the remaining assets in Lake Zurich, Illinois resulting in total cash proceeds of \$4.7 million.

16. INVESTMENTS

In August 2007 and December 2008, the Company made an aggregate investment of \$7.5 million in kaleo, Inc. ("kaléo"), a privately held specialty pharmaceutical company dedicated to building innovative solutions for serious and life-threatening medical conditions. Tredegar historically accounted for its investment in kaléo under the fair value option. At the time of the initial investment, the Company elected the fair value option of accounting since its investment objectives were similar to those of venture capitalists, which typically do not have controlling financial interests. kaléo's stock is not publicly traded.

On December 27, 2021, the Company completed the sale of its investment interests in kaléo (Series A-3 Preferred Stock, Series B Preferred Stock and common stock) that, taken together, represented on a fully-diluted basis an approximate 18% interest in kaléo. Tredegar received closing cash proceeds of \$47.1 million. A pre-tax gain of \$12.8 million on the Company's investment in kaléo was recognized in the full year ended December 31, 2021 compared to a pre-tax loss of \$60.9 million and pre-tax gain of \$28.5 million in the full years ended December 31, 2020 and 2019, respectively, which are reported in "Other income (expense), net" in the consolidated statements of income. The gain in 2021 includes a \$0.3 million dividend received from kaléo in the first quarter of 2021 and the gain in 2019 includes a \$17.6 million dividend received from kaléo.

17. ASSET IMPAIRMENTS AND COSTS ASSOCIATED WITH EXIT AND DISPOSAL ACTIVITIES

In connection with the anticipated customer product transitions in Surface Protection, the Company recognized severance and other employee-related expenses of \$1.6 million in the fourth quarter of 2020. The Company recognizes termination benefits that are covered by a contract or an ongoing benefit arrangement when it is probable that employees will be entitled to benefits and the amount can be reasonably estimated. Other accrued expenses and losses related to asset impairments and costs associated with exit and disposal activities for continuing operations were not material for the years ended December 31, 2021, 2020 and 2019, respectively.

18. CONTINGENCIES

Tredegar is involved in various stages of investigation and remediation relating to environmental matters at certain current and former plant locations. Where the Company has determined the nature and scope of any required environmental

remediation activity, estimates of cleanup costs have been obtained and accrued. As efforts continue to maintain compliance with applicable environmental laws and regulations, additional contingencies may be identified. If additional contingencies are identified in the future, the Company's practice is to determine at that time the nature and scope of those contingencies, obtain and accrue estimates of the cost of remediation, and perform remediation. While the Company believes it is currently adequately accrued for known environmental issues, it is possible that unexpected future costs for known or unknown environmental issues could have a material adverse effect on its financial condition, results of operations and cash flows at that time.

The Company is involved in various other legal actions arising in the normal course of business. After taking into consideration the relevant information, the Company believes that it has sufficiently accrued for probable losses and that the actions will not have a material adverse effect on its financial position.

From time to time, the Company enters into transactions with third parties in connection with the sale of assets or businesses in which it agrees to indemnify the buyers or third parties involved in the transaction, or in which the sellers or third parties involved in the transaction agree to indemnify Tredegar, for certain liabilities or risks related to the assets or business. Also, in the ordinary course of its business, the Company may enter into agreements with third parties for the sale of goods or services that may contain indemnification provisions. In the event that an indemnification claim is asserted, liability for indemnification would be subject to an assessment of the underlying facts and circumstances under the terms of the applicable agreement. For these reasons, Tredegar is unable to estimate the maximum amount of the potential future liability under the indemnity provisions of these agreements. The Company does, however, accrue for losses for any known contingent liability, including those that may arise from indemnification provisions, when future payment is probable and the amount is reasonably estimable. The Company discloses contingent liabilities if the probability of loss is reasonably possible and material.

19. SELECTED QUARTERLY FINANCIAL DATA

Tredegar Corporation and Subsidiaries
(In Thousands, Except Per-Share Amounts)
(Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
For the year ended December 31, 2021				
Sales	\$ 184,822	\$ 211,129	\$ 209,517	\$ 220,986
Gross profit	37,313	45,394	31,497	34,328
Income (loss) from continuing operations, net of tax	9,618	20,728	6,229	21,358
Income (loss) from discontinued operations, net of tax	(587)	508	(26)	(6)
Net income (loss)	\$ 9,031	\$ 21,236	\$ 6,203	\$ 21,352
Earnings (loss) per share:				
Basic:				
Continuing operations	\$ 0.29	\$ 0.62	\$ 0.19	\$ 0.64
Discontinued operations	(0.02)	0.02	—	—
Basic	\$ 0.27	\$ 0.64	\$ 0.19	\$ 0.64
Diluted:				
Continuing operations	\$ 0.29	\$ 0.61	\$ 0.19	\$ 0.63
Discontinued operations	(0.02)	0.02	—	—
Diluted	\$ 0.27	\$ 0.63	\$ 0.19	\$ 0.63
For the year ended December 31, 2020				
Sales	\$ 192,136	\$ 186,260	\$ 184,370	\$ 192,524
Gross profit	40,092	46,331	41,909	42,305
Income (loss) from continuing operations, net of tax	(20,663)	14,332	(16,976)	6,475
Income (loss) from discontinued operations, net of tax	(1,658)	(3,136)	(48,237)	(5,580)
Net income	\$ (22,321)	\$ 11,196	\$ (65,213)	\$ 895
Earnings per share:				
Basic:				
Continuing operations	\$ (0.62)	\$ 0.43	\$ (0.51)	\$ 0.19
Discontinued operations	(0.05)	(0.10)	(1.44)	(0.17)
Basic	\$ (0.67)	\$ 0.33	\$ (1.95)	\$ 0.02
Diluted:				
Continuing operations	\$ (0.62)	\$ 0.43	\$ (0.51)	\$ 0.19
Discontinued operations	(0.05)	(0.10)	(1.44)	(0.17)
Diluted	\$ (0.67)	\$ 0.33	\$ (1.95)	\$ 0.02

Due to rounding, the sum of quarterly amounts presented in the table above may not add up precisely to the corresponding full year amounts.

Item 16. FORM 10-K SUMMARY

Not Applicable.

EXHIBIT INDEX

- 3.1 [Amended and Restated Articles of Incorporation of Tredegar \(filed as Exhibit 3.1 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- 3.1.1 [Articles of Amendment to Amended and Restated Articles of Incorporation of Tredegar \(filed as Exhibit 3.3 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- 3.1.2 [Articles of Amendment to Amended and Restated Articles of Incorporation of Tredegar, as of May 24, 2013 \(filed as Exhibit 3.1 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on May 29, 2013 and incorporated herein by reference\)](#)
- 3.1.3 [Articles of Amendment to Amended and Restated Articles of Incorporation of Tredegar, as of May 4, 2016 \(filed as Exhibit 3.1 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on May 6, 2016, and incorporated herein by reference\)](#)
- 3.2 [Amended and Restated Bylaws of Tredegar \(filed as Exhibit 3.1 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on March 30, 2020, and incorporated herein by reference\)](#)
- 4.1 [Description of Registered Securities \(filed as Exhibit 4.1 to Tredegar's Annual Report on Form 10-K \(File No 1-10258\) for the year ended December 31, 2019, and incorporated herein by reference\)](#)
- 10.1 [Amended and Restated Credit Agreement, dated as of June 28, 2019, among Tredegar, as borrower, the lenders named therein, JPMorgan Chase Bank, N.A., as administrative agent, SunTrust Bank, Citizens Bank, N.A. and PNC Bank, National Association, as co-syndication agents, and U.S. Bank National Association, Bank of America, N.A. and Wells Fargo Bank, National Association, as co-documentation agents, and the other lenders party thereto \(filed as Exhibit 4.1 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on July 1, 2019, and incorporated herein by reference\)](#)
- 10.1.1 [Amended and Restated Guaranty, dated as of June 28, 2019, by and among the subsidiaries of Tredegar listed on the signature pages thereto in favor of JPMorgan Chase Bank, N.A., as administrative agent, for the ratable benefit of the Holders of Guaranteed Obligations \(as defined therein\) \(filed as Exhibit 4.2 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on July 1, 2019, and incorporated herein by reference\)](#)
- 10.1.2 [Amended and Restated Pledge and Security Agreement, dated as of June 28, 2019, by and among Tredegar and the subsidiaries of Tredegar listed on the signature pages thereto and JPMorgan Chase Bank, N.A., as administrative agent, for the ratable benefit of the Secured Parties \(as defined therein\) \(filed as Exhibit 4.3 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on July 1, 2019, and incorporated herein by reference\)](#)
- 10.1.3 [Amendment No. 1 to the Amended and Restated Credit Agreement, dated as of December 1, 2020, among Tredegar Corporation, as borrower, the lenders named therein, JPMorgan Chase Bank, N.A., as administrative agent, Truist Bank, Citizens Bank, N.A. and PNC Bank, National Association, as co-syndication agents, and U.S. Bank National Association, Bank of America, N.A. and Wells Fargo Bank, National Association, as co-documentation agents, and the other lenders party thereto \(filed as Exhibit 4.1 to Tredegar's Current Report on Form 8-K \(File No. 1-10258\), filed on December 3, 2020, and incorporated herein by reference\)](#)
- 10.1.4 [Amendment No. 2 to the Amended and Restated Credit Agreement, dated as of November 22, 2021, among Tredegar Corporation, as borrower, the lenders named therein, JPMorgan Chase Bank, N.A., as administrative agent, Truist Bank, Citizens Bank, N.A. and PNC Bank, National Association, as co-syndication agents, and U.S. Bank National Association, Bank of America, N.A. and Wells Fargo Bank, National Association, as co-documentation agents, and the other lenders party thereto](#)
- 10.2 [Reorganization and Distribution Agreement, dated as of June 1, 1989, between Tredegar and Ethyl Corporation \(filed as Exhibit 10.1 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- *10.3 [Employee Benefits Agreement, dated as of June 1, 1989, between Tredegar and Ethyl Corporation \(filed as Exhibit 10.2 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- 10.4 [Tax Sharing Agreement, dated as of June 1, 1989, between Tredegar and Ethyl Corporation \(filed as Exhibit 10.3 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- 10.5 [Indemnification Agreement, dated as of June 1, 1989, between Tredegar and Ethyl Corporation \(filed as Exhibit 10.4 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- *10.6 [Tredegar Industries, Inc. Retirement Benefit Restoration Plan \(filed as Exhibit 10.7 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- *10.6.1 [Amendment to the Tredegar Industries, Inc. Retirement Benefit Restoration Plan \(filed as Exhibit 10.7.1 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2004, and incorporated herein by reference\)](#)
- *10.7 [Tredegar Industries, Inc. Savings Plan Benefit Restoration Plan \(filed as Exhibit 10.6 to Tredegar's Annual Report on Form 10-K \(File No. 1-10258\) for the year ended December 31, 2013, and incorporated herein by reference\)](#)

*10.7.1	Resolutions of the Executive Committee of the Board of Directors of Tredegar adopted on December 28, 2004 (effective as of December 31, 2004) amending the Tredegar Corporation Retirement Savings Plan Benefit Restoration Plan (filed as Exhibit 10.9.1 to Tredegar's Current Report on Form 8-K (File No. 1-10258), filed on December 30, 2004, and incorporated herein by reference)
*10.8	Tredegar 2004 Equity Incentive Plan as Amended and Restated Effective March 27, 2009 (filed as Annex 1 to Tredegar's Definitive Proxy Statement on Schedule 14A (File No. 1-10258) filed on April 14, 2009 and incorporated herein by reference)
*10.9	Form of Notice of Nonstatutory Stock Option Grant and Nonstatutory Stock Option Terms and Conditions (filed as Exhibit 10.3 to Tredegar's Current Report on Form 8-K (File No. 1-10258), filed on February 27, 2013, and incorporated herein by reference)
*10.10	Form of Notice of Stock Unit Award and Stock Unit Award Terms and Conditions (filed as Exhibit 10.1 to Tredegar's Current Report on Form 8-K (File No. 1-10258), filed on March 1, 2016, and incorporated herein by reference)
*10.11	Form of Notice of Stock Award and Stock Award Terms and Conditions (filed as Exhibit 10.2 to Tredegar's Current Report on Form 8-K (File No. 1-10258), filed on March 1, 2016, and incorporated herein by reference)
*10.12	Form of Notice of Stock Award and Stock Award Terms and Conditions (filed as Exhibit 10.18 to Tredegar's Quarterly Report on Form 10-Q (File No. 1-10258) for the quarterly period ended March 31, 2020, and incorporated herein by reference)
*10.13	Form of Notice of Stock Appreciation Right Grant and Stock Appreciation Right Terms and Conditions (filed as Exhibit 10.19 to Tredegar's Quarterly Report on Form 10-Q (File No. 1-10258) for the quarterly period ended March 31, 2020, and incorporated herein by reference)
*10.14	Form of Notice of Nonstatutory Stock Option Grant and Nonstatutory Stock Option Terms and Conditions (filed as Exhibit 10.20 to Tredegar's Quarterly Report on Form 10-Q (File No. 1-10258) for the quarterly period ended March 31, 2020, and incorporated herein by reference)
*10.15	Tredegar 2018 Equity Incentive Plan, as amended and restated (filed as Annex A to Tredegar's Definitive Proxy Statement on Schedule 14A (File No. 1-10258) filed on March 25, 2021, and incorporated herein by reference)
*10.16	Form of Notice of Nonstatutory Stock Option Grant and Nonstatutory Stock Option Terms and Conditions (filed as Exhibit 10.1 to Tredegar's Current Report on Form 8-K (File No. 1-10258), filed on May 7, 2018, and incorporated herein by reference)
*10.17	Form of Notice of Nonstatutory Stock Option Grant and Nonstatutory Stock Option Terms and Conditions (filed as Exhibit 10.3 to Tredegar Corporation's Registration Statement on Form S-8 (Registration No. 333-230386), filed on March 19, 2019, and incorporated herein by reference)
+21	Subsidiaries of Tredegar
+23	Consent of KPMG LLP, Independent Registered Public Accounting Firm
+31.1	Certification of President and Chief Executive Officer (Principal Executive Officer) of Tredegar, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
+31.2	Certification of Vice President and Chief Financial Officer (Principal Financial Officer) of Tredegar, pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
+32.1	Certification of President and Chief Executive Officer (Principal Executive Officer) of Tredegar, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
+32.2	Certification of Vice President and Chief Financial Officer (Principal Financial Officer) of Tredegar, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
+101	XBRL Instance Document and Related Items
+104	Cover Page Interactive Data File (formatted in iXBRL and contained in Exhibit 101)

* Denotes compensatory plans or arrangements or management contracts.

+ Filed herewith

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.

TREDEGAR CORPORATION
(Registrant)

Dated: March 11, 2022

By /s/ John M. Steitz
John M. Steitz
President and 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 indicated on March 11, 2022.

Signature

Title

<u>/s/ John M. Steitz</u> (John M. Steitz)	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ D. Andrew Edwards</u> (D. Andrew Edwards)	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
<u>/s/ Frasier W. Brickhouse, II</u> (Frasier W. Brickhouse, II)	Corporate Treasurer and Controller (Principal Accounting Officer)
<u>/s/ John D. Gottwald</u> (John D. Gottwald)	Chairman of the Board of Directors
<u>/s/ Gregory A. Pratt</u> (Gregory A. Pratt)	Lead Director
<u>/s/ George C. Freeman, III</u> (George C. Freeman, III)	Director
<u>/s/ William M. Gottwald</u> (William M. Gottwald)	Director
<u>/s/ Kenneth R. Newsome</u> (Kenneth R. Newsome)	Director
<u>/s/ Thomas G. Snead, Jr.</u> (Thomas G. Snead, Jr.)	Director
<u>/s/ Carl E. Tack, III</u> (Carl E. Tack, III)	Director
<u>/s/ Anne G. Waleski</u> (Anne G. Waleski)	Director

AMENDMENT NO. 2

Dated as of November 22, 2021

to

AMENDED AND RESTATED CREDIT AGREEMENT

Dated as of June 28, 2019

THIS AMENDMENT NO. 2 (this "Amendment") is made as of November 22, 2021 by and among TREDEGAR CORPORATION, a Virginia corporation (the "Borrower"), the financial institutions listed on the signature pages hereof and JPMORGAN CHASE BANK, N.A., as Administrative Agent (the "Administrative Agent"), under that certain Amended and Restated Credit Agreement dated as of June 28, 2019 by and among the Borrower, the Lenders and the Administrative Agent (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings given to them in the Credit Agreement.

WHEREAS, the Borrower has requested that the requisite Lenders and the Administrative Agent agree to make certain amendments to the Credit Agreement;

WHEREAS, the Borrower, the Lenders party hereto and the Administrative Agent have so agreed on the terms and conditions set forth herein;

NOW, THEREFORE, in consideration of the premises set forth above, the terms and conditions contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower, the Lenders party hereto and the Administrative Agent hereby agree to enter into this Amendment.

1. Amendments to the Credit Agreement. The parties hereto agree that, effective as of the date of satisfaction of the conditions precedent set forth in Section 2 below, the Credit Agreement is hereby amended as follows (the Credit Agreement as so amended, the "Amended Credit Agreement"):
 - a. Section 1.01 of the Credit Agreement is hereby amended to insert the following definition therein in the appropriate alphabetical order as follows:

"Amendment No. 2 Effective Date" means November 22, 2021.
 - b. Section 1.01 of the Credit Agreement is hereby amended to restate the definition of "Agreed Currencies" appearing therein in its entirety as follows:

"Agreed Currencies" means (i) Dollars and (ii) any other currency (x) that is a lawful currency (other than Dollars) that is readily available and freely transferable and convertible into Dollars and (y) that is agreed to by the Administrative Agent and each of the Lenders. For the avoidance of doubt, it is understood and agreed that on and after the Amendment No. 2 Effective Date, the only Agreed Currency under this Agreement shall be Dollars (notwithstanding any references in this Agreement to any other currency) and no additional currency shall

be included as an Agreed Currency until such currency is requested by the Borrower and approved by the Administrative Agent and each of the Lenders pursuant to an amendment to this Agreement mutually satisfactory to the Borrower, the Administrative Agent and each of the Lenders.

c. The definition of "Interest Period" set forth in Section 1.01 of the Credit Agreement is hereby amended to replace the reference to "one, two, three or six months thereafter" appearing therein with a reference to "one, three or six months thereafter" therefor.

2. Conditions of Effectiveness. The effectiveness of this Amendment is subject to the satisfaction of the following conditions precedent:
 - a. The Administrative Agent (or its counsel) shall have received counterparts of (i) this Amendment duly executed by the Borrower, the Required Lenders and the Administrative Agent and (ii) the Consent and Reaffirmation attached hereto duly executed by the Subsidiary Guarantors.
 - b. The Administrative Agent shall have received payment of the Administrative Agent's and its affiliates' fees and reasonable and documented out-of-pocket expenses (including reasonable fees, charges and expenses of counsel for the Administrative Agent) in connection with this Amendment and the other Loan Documents to the extent provided for in Section 9.03 of the Amended Credit Agreement.
3. Representations and Warranties of the Borrower. The Borrower hereby represents and warrants as follows:
 - a. This Amendment and the Amended Credit Agreement have been duly authorized by all requisite organizational action and, if required, stockholder action, and this Amendment has been duly executed and delivered by the Borrower.
 - b. This Amendment and the Amended Credit Agreement constitute legal, valid and binding obligations of the Borrower, enforceable against the Borrower in accordance with its terms, except as enforceability may be limited by bankruptcy, insolvency or similar laws affecting the enforcement of creditor's rights generally.
 - c. As of the date hereof and after giving effect to the terms of this Amendment, (i) no Default has occurred and is continuing and (ii) the representations and warranties of the Borrower set forth in the Amended Credit Agreement are true and correct in all material respects (or, in the case of any representation or warranty qualified by materiality or Material Adverse Effect, in all respects), except to the extent that such representations and warranties specifically refer to an earlier date, in which case they shall be true and correct in all material respects (or, in the case of any representation or warranty qualified by materiality or Material Adverse Effect, in all respects) as of such earlier date.
4. Reference to and Effect on the Credit Agreement.
 - a. Upon the effectiveness hereof, each reference to the Credit Agreement in the Credit Agreement or any other Loan Document shall mean and be a reference to the Amended Credit Agreement.

- b. Each Loan Document and all other documents, instruments and agreements executed and/or delivered in connection therewith shall remain in full force and effect and are hereby ratified and confirmed.
 - c. The execution, delivery and effectiveness of this Amendment shall not operate as a waiver of any right, power or remedy of the Administrative Agent or the Lenders, nor constitute a waiver of any provision of the Credit Agreement, the other Loan Documents or any other documents, instruments and agreements executed and/or delivered in connection therewith.
 - d. This Amendment is a Loan Document.
5. Governing Law. This Amendment shall be construed in accordance with and governed by the law of the State of New York.
6. Headings. Section headings used herein are for convenience of reference only, are not part of this Amendment and shall not affect the construction of, or be taken into consideration in interpreting, this Amendment.
7. Counterparts. This Amendment may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. The words “execution,” “signed,” “signature,” “delivery,” and words of like import in or relating to this Amendment and/or any document to be signed in connection with this Amendment and the transactions contemplated hereby shall be deemed to include Electronic Signatures (as defined below), deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be. As used herein, “Electronic Signatures” means any electronic symbol or process attached to, or associated with, any contract or other record and adopted by a person with the intent to sign, authenticate or accept such contract or record.

[Signature Pages Follow]

IN WITNESS WHEREOF, this Amendment has been duly executed as of the day and year first above written.

TREDEGAR CORPORATION, as the Borrower

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Executive Vice President and Chief Financial Officer

JPMORGAN CHASE BANK, N.A., individually as a Lender and as Administrative Agent

/s/ Louis Salvino

Name: Louis Salvino

Title: Vice President

TRUIST BANK (as successor by merger to SunTrust Bank), as a Lender

/s/ William P. Rutkowski

Name: William P. Rutkowski

Title: Director

CITIZENS BANK, N.A., as a Lender

/s/ A. Paul Dawley

Name: A. Paul Dawley

Title: Senior Vice President

PNC BANK, NATIONAL ASSOCIATION, as a Lender

/s/ David Notaro

Name: David Notaro

Title: Senior Vice President

U.S. BANK NATIONAL ASSOCIATION, as a Lender

/s/ Alan Stephens

Alan Stephens

Senior Vice President

BANK OF AMERICA, N.A., as a Lender

/s/ Colleen Landau

Name: Colleen Landau

Title: Senior Vice President

WELLS FARGO BANK, NATIONAL ASSOCIATION,

/s/ Daniel Duval

Name: Daniel Duval

Title: Vice President

FIRST HORIZON BANK, as a Lender

/s/ Todd Warrick

Name: Todd Warrick

Title: EVP

FIFTH THIRD BANK, NATIONAL ASSOCIATION, as a Lender

/s/ Michael S. Barnett

Name: Michael S. Barnett

Title: Senior Vice President

THE HUNTINGTON NATIONAL BANK, as a Lender

/s/ Gregory R. Ryan

Name: Gregory R. Ryan

Title: Managing Director

CITIBANK, N.A., as a Lender

/s/ Andrew Stella

Name: Andrew Stella

Title: Vice President

CONSENT AND REAFFIRMATION

Each of the undersigned hereby acknowledges receipt of a copy of the foregoing Amendment No. 2 to the Amended and Restated Credit Agreement dated as of June 28, 2019 (as amended, restated, supplemented or otherwise modified, the "Credit Agreement") by and among Tredegar Corporation, a Virginia corporation, the financial institutions from time to time party thereto (the "Lenders") and JPMorgan Chase Bank, N.A., as Administrative Agent (the "Administrative Agent"), which Amendment No. 2 is dated as of November 22, 2021 (the "Amendment"). Capitalized terms used in this Consent and Reaffirmation and not defined herein shall have the meanings given to them in the Credit Agreement. Without in any way establishing a course of dealing by the Administrative Agent or any Lender, each of the undersigned consents to the Amendment and reaffirms the terms and conditions of the Credit Agreement and any other Loan Document executed by it and acknowledges and agrees that such Credit Agreement and each and every such Loan Document executed by the undersigned in connection with the Credit Agreement remains in full force and effect and is hereby reaffirmed, ratified and confirmed. All references to the Credit Agreement contained in the above-referenced documents shall be a reference to the Credit Agreement as so modified by the Amendment.

Dated: November 22, 2021

[Signature Page Follows]

IN WITNESS WHEREOF, this Consent and Reaffirmation has been duly executed as of the day and year first above written.

TREDEGAR PERFORMANCE FILMS INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

TERPHANE HOLDINGS LLC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

BONNELL ALUMINUM, INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

BONNELL ALUMINUM (NILES), LLC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

BONNELL ALUMINUM (CORPORATE), INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

BONNELL ALUMINUM (CLEARFIELD), INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

TREDEGAR SURFACE PROTECTION, LLC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

TREDEGAR FAR EAST CORPORATION

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: President

TREDEGAR FILM PRODUCTS (EUROPE), INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: President

TREDEGAR INVESTMENTS II, LLC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: President

TREDEGAR FILMS DEVELOPMENT, INC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: President

TREDEGAR FILM PRODUCTS (LATIN AMERICA), INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: President

TAC HOLDINGS, LLC

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

BONNELL ALUMINUM (ELKHART), INC.

/s/ D. Andrew Edwards

Name: D. Andrew Edwards

Title: Vice President

Tredegar CorporationEntity

Tredegar Corporation
 Bon L Aluminum LLC
 Bon L Campo Limited Partnership
 Bon L Holdings LLC
 Bonnell Aluminum (Clearfield), Inc.
 Bonnell Aluminum (Corporate), Inc.
 Bonnell Aluminum (Elkhart), Inc.
 Bonnell Aluminum, Inc.
 Bonnell Aluminum (Niles), LLC
 El Campo GP, LLC
 Guangzhou Tredegar Film Products Company Limited
 Idlewood Properties, Inc.
 TAC Holdings LLC
 Terphane Acquisition Corp. II
 Terphane Holdings LLC
 Terphane LLC
 Terphane Limitada
 Tredegar Far East Corporation
 Tredegar Film Products (Europe), Inc.
 Tredegar Film Products (Korea), Inc.
 Tredegar Film Products (Latin America), Inc.
 Tredegar Films Development, Inc.
 Tredegar Investments, LLC
 Tredegar Investments II, LLC
 Tredegar Performance Films Inc.
 Tredegar Surface Protection, LLC

State of Incorporation

Virginia
 Virginia
 Texas
 Virginia
 Delaware
 Virginia
 Virginia
 Virginia
 Virginia
 Virginia
 China
 Virginia
 Virginia
 Cayman Islands
 Delaware
 Delaware
 Brazil
 Virginia
 Virginia
 Korea
 Virginia
 Virginia
 Virginia
 Virginia
 Virginia
 Virginia

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-120132, No. 333-115423, No. 333-66562, No. 033-64647, No. 333-257153, and No. 333-230386) on Form S-8 of our reports dated March 11, 2022, with respect to the consolidated financial statements of Tredegar Corporation and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Richmond, Virginia
March 11, 2022

Section 302 Certification

I, John M. Steitz, certify that:

- (1) I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2021, of Tredegar Corporation;
- (2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- (4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- (5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 11, 2022

/s/ John M. Steitz

John M. Steitz

President and Chief Executive Officer

(Principal Executive Officer)

Section 302 Certification

I, D. Andrew Edwards, certify that:

- (1) I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2021, of Tredegar Corporation;
- (2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- (3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- (4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting;
- (5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 11, 2022

/s/ D. Andrew Edwards

D. Andrew Edwards
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Tredegar Corporation (the “Company”) for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, John M. Steitz, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ John M. Steitz

John M. Steitz
President and Chief Executive Officer
(Principal Executive Officer)
March 11, 2022

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of Tredegar Corporation (the “Company”) for the year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, D. Andrew Edwards, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ D. Andrew Edwards

D. Andrew Edwards

Executive Vice President and Chief Financial Officer

(Principal Financial Officer)

March 11, 2022