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**

Commission file number 001-38265

nVent Electric plc

(Exact name of Registrant as specified in its charter)

Ireland	**98-1391970**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification number)*

The Mille, 1000 Great West Road, 8th Floor (East), London, TW8 9DW, United Kingdom

(Address of principal executive offices)

Registrant's telephone number, including area code: 44-20-3966-0279

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

Title of each class	Trading symbol	Name of each exchange on which registered
Ordinary Shares, nominal value $0.01 per share	NVT	New York Stock Exchange

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes þ 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 þ

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 þ 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 during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes þ 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 ☑ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

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 þ

Aggregate market value of voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of $30.90 per share as reported on the New York Stock Exchange on June 30, 2021 (the last business day of Registrant's most recently completed second quarter): $5,134,564,163.

The number of shares outstanding of Registrant's only class of common stock on December 31, 2021 was 166,076,804.

DOCUMENTS INCORPORATED BY REFERENCE

Parts of the Registrant's definitive proxy statement for its annual general meeting to be held on May 13, 2022, are incorporated by reference in this Form 10-K in response to Part III, ITEM 10, 11, 12, 13 and 14.

nVent Electric plc

Annual Report on Form 10-K
For the Year Ended December 31, 2021

PART I

ITEM 1. BUSINESS

COMPANY OVERVIEW

nVent Electric plc is a leading global provider of electrical connection and protection solutions. We believe our inventive electrical solutions enable safer systems and ensure a more secure world. We design, manufacture, market, install and service high performance products and solutions that connect and protect some of the world's most sensitive equipment, buildings and critical processes. We offer a comprehensive range of enclosures, electrical fastening solutions and thermal management solutions across industry-leading brands that are recognized globally for quality, reliability and innovation.

Our broad range of products and solutions connect and protect our customers' mission-critical equipment from hazardous conditions, improving their utilization, lowering costs and minimizing downtime. The cost of our products typically represents a small proportion of the total cost of our customers' end systems. We also are a small cost relative to the potential cost of failure that our products help avoid. We have a portfolio of premier, industry-leading brands, including nVent CADDY, ERICO, HOFFMAN, RAYCHEM, SCHROFF and TRACER, some of which have a history spanning over 100 years, that cover a wide range of verticals, including Industrial, Commercial & Residential, Energy and Infrastructure.

Unless the context otherwise indicates, references herein to "nVent," the "Company," and such words as "we," "us," and "our" include nVent Electric plc and its consolidated subsidiaries. Our principal office is in London, United Kingdom and our management office in the United States ("U.S.") is in Minneapolis, Minnesota. The Company was incorporated in Ireland on May 30, 2017. Although our jurisdiction of organization is Ireland, we manage our affairs so that we are centrally managed and controlled in the United Kingdom (the "U.K.") and have our tax residency in the U.K.

HISTORY AND DEVELOPMENT

On April 30, 2018, Pentair plc ("Pentair") completed the separation of its Water business and its Electrical business into two independent, publicly-traded companies (the "separation"). To effect the separation, Pentair distributed to its shareholders one ordinary share of nVent for every ordinary share of Pentair held as of the record date of April 17, 2018. As a result of the distribution, nVent became an independent publicly-traded company and began trading under the symbol "NVT" on the New York Stock Exchange on May 1, 2018.

Our roots within Pentair trace back to the acquisition of Federal-Hoffman Corporation in 1988, which included the nVent HOFFMAN enclosures brand. From that starting point, we have grown both organically and via acquisition. Our Enclosures business first applied lean principles within the organization in the 1990s, leveraging its culture of customer service and operational excellence. In 2012, Pentair merged with Tyco International Ltd.'s Flow Control division, which included our Thermal Management business and the nVent RAYCHEM brand, a global leader in heat tracing solutions. In 2015, Pentair acquired ERICO Global Company, a leading global manufacturer of superior engineered electrical and fastening products, which operates as our Electrical & Fastening Solutions business, broadening our product offering and enabling us to provide additional global solutions to our combined customers.

We are "One nVent", with a unified focus on commercial excellence, digital transformation, scaled and integrated technology, and global presence and capabilities. As we continue scaling our capabilities under our umbrella brand of nVent, we expect to expand our products and solutions and to continue to differentiate our company by creating solutions that solve problems for our customers.

Our Spark management system defines how we operate. The five elements of Spark are People, Growth, Lean, Digital and Velocity. Together, they provide the mindset and operating system to propel the success of our company. Spark supports the high performance culture we are building at nVent.

- ***People*** are at the core of Spark, positively impacting our business and growing their careers.
- ***Growth*** is the foundation of Spark, driving shareholder, customer and employee value.
- ***Lean*** is the relentless pursuit of eliminating waste and increasing velocity.
- ***Digital*** transforms our products and how we do business, improving both customer and employee experiences.
- ***Velocity*** is increasing speed in all we do for each other and our customers.

BUSINESS AND PRODUCTS

We operate across three segments: Enclosures, Electrical & Fastening Solutions and Thermal Management. The following is a brief description of each of the Company's reportable segments and business activities.

Enclosures

Our Enclosures business provides innovative solutions to connect and protect critical electronics, communication, control and power equipment. We are a leader in the enclosures sector, and our key brands, nVent HOFFMAN and SCHROFF, have a long history of solving customers' problems by providing high quality solutions.

nVent HOFFMAN provides trusted enclosure solutions for challenging operating environments and is one of the largest brands of enclosures in North America and a leader globally. The offerings connect and protect through reliable solutions that protect, power and cool equipment used by panel builders, original equipment manufacturers and directly by other end-users, including customized products. The nVent HOFFMAN brand is over 75 years old and is recognized for delivering superior design, testing, certification and overall product quality. nVent HOFFMAN's product customization and global footprint, along with reputation, have helped it garner long-standing relationships with many of the world's largest industrial companies.

nVent SCHROFF provides highly-customized and technologically-advanced enclosures. These products connect and protect mission-critical electronics and communications equipment by providing a wide range of innovative standard products and customized solutions. nVent SCHROFF's innovation is demonstrated by its constant flow of new product designs, including a focus on smart products capable of providing connectivity and remote management. The nVent SCHROFF brand is a leader due to its product flexibility and customer-first focus.

Electrical & Fastening Solutions

Our Electrical & Fastening Solutions business provides fastening solutions that connect and protect electrical and mechanical systems and civil structures.

We are a global leader in fastening solutions with spring steel and specialty metal fixings and reinforced steel connections, and our products are primarily marketed under the nVent CADDY brand. Our products reduce total installed cost by ease of installation, provide design flexibility and increase structural integrity in electrical and mechanical fastening applications through inventive products and solutions and customer intimacy. These products are targeted towards commercial and industrial verticals with applications in fire & seismic, data & telecommunications, electrical fastening and heating, ventilation and air conditioning. These products are primarily used by electricians, telecommunications installers and roof top contractors.

We are also a global leader in bonding, grounding, lightning protection and low voltage power distribution products and solutions. These products are primarily marketed under the nVent ERICO brand. We offer a comprehensive range of facility electrical connection and protection solutions to protect against electrical transients to improve safety and reliability of electrical systems. Our products reduce total cost of ownership and provide design flexibility by offering maintenance free and reliable products and global end-user application expertise and intimacy. These products are targeted towards commercial, infrastructure and industrial verticals with applications in telecommunication, power distribution and facility electrical protection. These products and solutions are primarily used by electricians, panel builders, energy contractors and lightning protection installers.

Thermal Management

Our Thermal Management business provides electric thermal solutions that connect and protect critical buildings, infrastructure, industrial processes and people. Its highly reliable and easy-to-install solutions lower total cost of ownership to building owners, facility managers, operators and end users. Thermal Management's products have been installed in some of the world's most iconic buildings.

For industrial and energy, we provide industrial heat-tracing and wiring, control and monitoring, sensing, engineering and construction services under industry leading nVent RAYCHEM and TRACER brands, primarily serving chemical and other industries. Products and solutions include heat tracing for freeze protection and process temperature maintenance, temperature control and monitoring systems, heat-traced tubing bundles, instrument winterization and tank heating systems. For commercial, residential and infrastructure, we provide products and services primarily under our nVent RAYCHEM brand. Applications include pipe freeze protection, roof and gutter deicing, surface snow melting, hot water temperature maintenance, floor heating, fire rated wiring and leak detection for healthcare, recreation, hospitality, commercial offices and education facilities.

Competition
The markets for our products and services are geographically diverse and highly competitive. We compete against large and well-established national and global companies, as well as regional and local companies and lower-cost manufacturers. Some of our competitors, in particular smaller companies, attempt to compete based primarily on price, localized expertise and local relationships, especially with respect to products and applications that do not require a great deal of engineering or technical expertise. In addition, during economic downturns average selling prices tend to decrease as market participants compete more aggressively on price. Competition focuses on product performance, price, quality and service.

Our success depends on a variety of factors, including technical expertise, reputation for quality and reliability, timeliness of delivery, new product innovation, previous installation history, contractual terms and price. As many of our products sell through electrical distributors, data center contractors, original equipment manufacturers and maintenance contractors, our success also depends on building and partnering with a strong channel and distribution network.

Seasonality
We generally experience increased demand for Electrical & Fastening Solutions products during the spring and summer months in the Northern Hemisphere and increased demand for Thermal Management products and services during the fall and winter months in the Northern Hemisphere.

Backlog of Orders by Segment

	December 31			
In millions	**2021**	**2020**	**$ change**	**% change**
Enclosures	$ 296.2	$ 117.0	$ 179.2	153.2 %
Electrical & Fastening Solutions	70.8	34.1	36.7	107.6
Thermal Management	191.5	155.9	35.6	22.8
Total	$ 558.5	$ 307.0	$ 251.5	81.9 %

A substantial portion of our revenues result from orders received and products delivered in the same month. Our backlog typically has a short manufacturing cycle and products generally ship within 90 days of the date on which a customer places an order. However, a portion of our backlog, particularly from orders for major capital projects, can take more than one year depending on the size and type of order. We record as part of our backlog all orders from external customers, which represent firm commitments, and are supported by a purchase order or other legitimate contract.

The increase in backlog from 2020 to 2021 was primarily the result of a significant increase in demand for our products and higher selling prices, along with increased order lead times, as compared to the prior year. We expect the majority of our backlog at December 31, 2021 will be shipped in 2022.

Raw materials
The principal materials we use in manufacturing our products are mild steel, stainless steel, electronic components, plastics (resins, fiberglass, epoxies), copper and paint (powder and liquid). In addition to the purchase of raw materials, we purchase some finished goods for distribution through our sales channels.

We purchase the materials we use in various manufacturing processes on the open market and the majority is available through multiple sources which are in adequate supply. We have certain long-term commitments, principally price commitments, for the purchase of various component parts and raw materials and believe that it is unlikely that any of these agreements would be terminated prematurely. Alternate sources of supply at competitive prices are available for most materials for which long-term commitments exist and we believe that the termination of any of these commitments would not have a material adverse effect on our financial position, results of operations or cash flows.

Certain commodities, such as metals and resin, are subject to market and duty-driven price fluctuations. We manage these fluctuations through several mechanisms, including long-term agreements with price adjustment clauses for significant commodity market movements in certain circumstances. Prices for raw materials, such as metals and resins, may trend higher in the future.

As COVID-19 conditions have improved and economic activity has increased, we have experienced supply chain challenges, including increased lead times, as well as inflation of raw materials, logistics and labor costs due to availability constraints and high demand. However, we have not experienced any significant work stoppages to date due to shortages of materials.

Intellectual property
Patents, non-compete agreements, proprietary technologies, customer relationships, trademarks, trade names and brand names are important to our business. However, we do not regard our business as being materially dependent upon any single patent, non-compete agreement, proprietary technology, customer relationship, trademark, trade name or brand name.

Patents, patent applications and license agreements will expire or terminate over time by operation of law, in accordance with their terms or otherwise. We do not expect the termination of patents, patent applications or license agreements to have a material adverse effect on our financial position, results of operations or cash flows.

Captive insurance subsidiary
We insure certain general and product liability, property, workers' compensation and automobile liability risks through our regulated wholly-owned captive insurance subsidiary, Tonka Bay Insurance Company ("Tonka Bay"). Reserves for policy claims are established based on actuarial projections of ultimate losses. Accruals are established with respect to liabilities insured by third parties, such as liabilities arising from acquired businesses, pre-Tonka Bay liabilities and those of certain non-U.S. operations.

Matters pertaining to Tonka Bay are discussed in ITEM 3, included in this Form 10-K.

HUMAN CAPITAL MATTERS
As of December 31, 2021, we employed approximately 9,900 people worldwide, of which approximately 33% are located in the U.S. A small portion of our U.S. employees are unionized, while outside the U.S., we have employees in certain countries, particularly in Europe, that are represented by an employee representative organization, such as a union, works council or employee association.

Inclusion and Diversity
We aspire to be an equitable, inclusive and diverse company. We believe that the unique contributions of individuals with varying backgrounds and experiences will benefit our businesses. Guided by our Win Right values, we are committed to creating a workplace culture where everyone is included and respected. Our Code of Conduct outlines our commitment to equal opportunity and fair treatment for all. We do not tolerate acts of harassment, including any conduct or statements made on the basis of protected status that are intimidating, hostile or abusive.

Our leaders actively support and encourage employee development and engagement, including through our CEO Inclusion Council and an active Inclusion & Diversity Advisory Council. These councils promote inclusion across all dimensions of diversity.

We also support our Employee Resource Groups (“ERGs”), which were created organically by our employees and which provide a support system to foster awareness, promote inclusion and respect and provide a sounding board on strategic initiatives for nVent. Open to all employees, the ERGs are designed to create connections and opportunities for development, training and community involvement. In 2021, we had approximately 800 members globally in our ERGs.

In 2021, we expanded our training programs by offering Diversity 101 training in employees' native languages in which all of our people managers attended. We also introduced a new People and Culture Scorecard performance metric to our annual incentive compensation plan for management employees. The Scorecard focuses on five quantitative metrics to help drive year-over-year improvement in the following categories:

- Inclusion Index score from our quarterly employee pulse survey
- Employee Resource Group membership
- Diverse candidate slates
- Global gender representation for our professional and management populations
- U.S. racial representation for our professional and management populations

Additional details on our People and Culture Scorecard will be provided in our annual Proxy Statement for our 2022 annual general meeting of shareholders.

All executive officers developed diversity action plans for their business segments and functions, highlighting focused efforts on improving human capital metrics, engagement and a deeper awareness of inclusion & diversity.

Global Gender Diversity In The Workplace, as based on EEO-1 Report categories (as of December 31, 2021):

- 44% of our executive leadership team are female; 56% are male
- 26% of our global management team are female; 74% are male
- 25% of all other employees are female; 75% are male

We also launched, established baseline metrics, and trained over 400 internal stakeholders on a formal Supply Diversity program in 2021.

Compensation and Benefits
We strive to offer our employees across the world comprehensive benefit programs that reflect the market practices in their country of employment. We participate in and review remuneration surveys from leading, independent consultants for all of our countries so that we have the information to set competitive wages and salaries.

We are dedicated to providing equitable compensation as a commitment to our people. By focusing on equitable pay, we enhance our ability to grow, retain and motivate diverse employees on our team. We believe diverse teams drive innovation, connection and growth for our employees.

As part of this commitment to our people, we conduct pay parity reviews of our compensation systems. The goal of these reviews is to ensure internal pay alignment and equitable treatment for employees, as well as providing competitive and performance-based pay.

Employee Engagement and Development
We believe it is important to hear from our employees to learn about what we are doing well, and where we can become stronger. During 2021, we conducted four pulse surveys with questions focused on our Inclusion Index and employee satisfaction. As discussed under “Inclusion and Diversity,” the Inclusion Index is one of the metrics used in the People and Culture Scorecard for our annual incentive compensation plan for management. Results from each of the pulse surveys were shared with people managers, who were encouraged to discuss results and potential improvement areas with their teams. In 2021, as part of our annual goal planning process, all of our people managers were assigned a people manager goal focused on engaging and developing their employees. Action items in the people manager goal included: completing all performance processes including goal setting, mid-year, and annual reviews on time; creating an action plan from the 2020 employee engagement survey results; supporting an increase in the diversity of our candidate slates; and helping to ensure that people managers and their direct reports completed all ethics and compliance training on time.

We are also focused on recognizing our employees. Employee recognition was identified as an area of focus following our 2020 employee engagement survey. In 2021, we launched a global, digitized recognition platform, which allows employees to publicly appreciate one another as well as managers to give monetary and non-monetary forms of recognition to their employees around the globe.

As part of our continued efforts to develop our people, we launched a leadership series that had over 500 participants, launched a formalized mentoring program, and refreshed our Culture program and delivered it to employees around the globe. Our professional employees were asked to create individual development plans identifying key competencies to continue to grow or develop. With the goal of aligning development with retention, we also encourage our employees to regularly engage with their managers to discuss their performance, development and career aspirations.

Code of Conduct Training
Our Code of Conduct training was offered in 12 different languages to employees in 34 countries. Topics included nVent’s Code of Business Conduct & Ethics, Preventing Bribery, Use of Social Media, Dignity and Respect in the Workplace and Data Privacy and Cybersecurity. In 2021, we completed the training with 100% completion rate among professional employees. Additionally we launched role-based training in the areas of Bribery, Kickbacks and Conflicts of Interest. In 2021, we continued rolling out our live Code of Conduct training program for our offline, factory team members to multiple sites in North America, China and Europe.

We provide multiple ways for employees to ask for help and report misconduct and illegal or unethical behavior, including doing so anonymously. A Helpline is available on our website (www.nventethics.com) and is available 24/7 and accessible in over 200 languages. We are committed to investigating and responding to reported concerns. nVent prohibits retaliation against anyone who raises concerns or makes good-faith reports regarding possible breaches of law or policy or ethical violations.

Workplace Health and Safety
The safety and well-being of our employees is our top priority. We are committed to preventing workplace injuries and maintaining a positive, healthy work environment. We encourage our employees to put safety first, speak up when they observe unsafe conditions or behaviors and follow all safety practices. We expect our employees to maintain a workplace free from illegal or controlled substances, weapons or potentially dangerous devices, and we strive for all nVent locations to meet or exceed all applicable Environmental, Health, and Safety ("EHS") requirements. We utilize a common safety standard identified within our EHS Lean Assessment highlighting expectations surrounding management commitment, employee engagement, metrics, regulatory compliance and hazard control.

We monitor and track health and safety data, including employee injuries, environmental releases and regulatory inspections. Additionally, we assess the EHS maturity of our locations by measuring progress against nVent's EHS Lean Assessment and Standards and region specific regulatory compliance evaluations, as well as nVent's employee driven risk notification program. Results are reviewed monthly to reduce recordable injury rates and to drive improvement within our EHS programs. Globally, we have adopted guidelines from the Occupational Safety and Health Administration (“OSHA”) in the United States to determine recordable injuries.

We have achieved a strong safety track record through employee engagement, behavior based safety and proactive risk management.

AVAILABLE INFORMATION
We make available free of charge (other than an investor's own Internet access charges) through our Internet website (http://www.nvent.com) our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and if applicable, amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). Reports of beneficial ownership filed by our directors and executive officers pursuant to Section 16(a) of the Exchange Act are also available on our website. We are not including the information contained on our website as part of, or incorporating it by reference into, this Annual Report on Form 10-K.

ITEM 1A. RISK FACTORS

You should carefully consider all of the information in this document and the following risk factors before making an investment decision regarding our securities. Any of the following risks could materially and adversely affect our business, financial condition, results of operations, cash flows and the actual outcome of matters as to which forward-looking statement are made in this document.

Risks Relating to the COVID-19 Pandemic

Our business, financial condition, results of operations and cash flows may be materially adversely affected by global public health epidemics, including the current global COVID-19 pandemic.

Our business, financial condition, results of operations and cash flows may be adversely affected if a global public health pandemic, including the current global COVID-19 pandemic, interferes with the ability of our employees, vendors and customers to perform our and their respective responsibilities and obligations relative to the conduct of our business. The COVID-19 pandemic has significantly impacted economic activity and markets around the world, and it has had, and could continue to have, a material negative impact on our business in numerous ways, including but not limited to those outlined below:

- The risk that we or our employees, vendors or customers may be prevented from conducting business activities for an indefinite period of time, including shutdowns that may be requested or mandated by governmental authorities or that we determine are appropriate to sanitize our facilities.

- Restrictions on travel to or from locations where we provide services, or restrictions on shipping products from certain jurisdictions where they are produced or into certain jurisdictions where customers are located.

- Inability to meet our customers’ needs and achieve costs targets due to disruptions in our manufacturing and supply arrangements caused by the loss or disruption of essential manufacturing and supply elements such as raw materials or other finished product components, transportation, workforce or other manufacturing and distribution capability.

- Failure of third parties on which we rely, including our suppliers, distributors, contractors and commercial banks, to meet their obligations to us, or significant disruptions in their ability to do so, which may be caused by their own financial or operational difficulties and may adversely impact our operations.

- Significant reductions in demand or significant volatility in demand for one or more of our products and a global economic recession that could further reduce demand and/or pricing for our products, resulting from actions taken by governments, businesses and/or the general public in an effort to limit exposure to and spreading of such infectious diseases, such as travel restrictions, quarantines and business shutdowns or slowdowns. Deteriorating economic and political conditions caused by the COVID-19 pandemic, such as increased unemployment, decreases in capital spending, business shutdowns or economic recessions, could cause a further decrease in demand for our products.

- Delays or modifications to our strategic plans, initiatives and goals due to disruptions or uncertainties related to the COVID-19 pandemic for a sustained period of time.

- An impairment in the carrying value of goodwill or intangible assets or a change in the useful life of definite-lived intangible assets could occur if there are sustained changes in consumer purchasing behaviors, government restrictions, financial results, or a deterioration of macroeconomic conditions.

- Actions we have taken or may take, or decisions we have made or may make as a consequence of the COVID-19 pandemic may result in legal claims or litigation against us.

- Vaccine mandates that may be implemented in jurisdictions in which our business operates which could adversely affect our workforce retention and hiring.

The global COVID-19 pandemic has created significant volatility, uncertainty and economic disruption, which may continue and could cause a global recession. The extent to which the COVID-19 pandemic will continue to impact our business, financial condition, results of operations and cash flows is uncertain and will depend on numerous evolving factors that we may not be able to accurately predict, including:

- the duration and scope of the pandemic;

- the ability of vaccines to protect against variant strains of COVID-19;

- governmental, business and individual actions taken in response to the pandemic and the impact of those actions on global economic activity;

- the actions taken in response to economic disruption;

- the impact of business disruptions on our customers and the resulting impact on their demand for our products and services; and

- our customers' ability to pay for our products and services.

Any of these factors could cause or contribute to the risks and uncertainties identified below and could materially adversely affect our business, financial condition, results of operations and cash flows.

Risks Relating to Our Business

General global economic and business conditions affect demand for our products.
We compete in various geographic regions and product markets around the world. Among these, the most significant are global industrial markets and commercial markets. We expect to experience fluctuations in revenues and results of operations due to economic and business cycles. Important factors for our business and the businesses of our customers include the overall strength of the economy and our customers' confidence in the economy, industrial and governmental capital spending, the strength of the commercial real estate market, unemployment rates, availability of commercial financing, interest rates and energy and commodity prices. The businesses of many of our industrial customers are to varying degrees cyclical and have experienced periodic downturns. While we attempt to minimize our exposure to economic or market fluctuations by serving a balanced mix of end markets and geographic regions, any of the above factors, individually or in the aggregate, or a significant or sustained downturn in a specific end market or geographic region could reduce demand for our products and services, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We compete in attractive markets with a high level of competition, which may result in pressure on our profit margins and limit our ability to maintain or increase the market share of our products.
The markets for our products and services are geographically diverse and highly competitive. We compete against large and well-established national and global companies, as well as regional and local companies and lower-cost manufacturers. We compete based on technical expertise, reputation for quality and reliability, timeliness of delivery, previous installation history, contractual terms and price. Some of our competitors, in particular smaller companies, attempt to compete based primarily on price, localized expertise and local relationships, especially with respect to products and applications that do not require a great deal of engineering or technical expertise. In addition, during economic downturns average selling prices tend to decrease as market participants compete more aggressively on price. If we are unable to continue to differentiate our products, services and solutions, or if we are forced to cut prices or to incur additional costs to remain competitive, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our future growth is dependent upon our ability to adapt our products, services and organization to meet the demands of local markets in both developed and emerging economies and by developing or acquiring new technologies that achieve market acceptance with acceptable margins.
We operate in global markets that are characterized by customer demand that is often global in scope but localized in delivery. We compete with thousands of smaller regional and local companies that may be positioned to offer products produced at lower cost than ours, or to capitalize on highly localized relationships and knowledge that are difficult for us to replicate. Also, in several emerging markets potential customers prefer local suppliers, in some cases because of existing relationships and in other cases because of local legal restrictions or incentives that favor local businesses. Accordingly, our future success depends upon a number of factors, including our ability to adapt our products, services, organization, workforce and sales strategies to fit localities throughout the world, particularly in high-growth emerging markets; identify emerging technological and other trends in our target end markets; and develop or acquire competitive products and services and bring them to market quickly and cost-effectively. The failure to effectively adapt our products or services could have a material adverse effect on our business, financial condition, results of operations and cash flows.

A sustained downturn in the energy industry, due to oil and gas prices decreasing or otherwise, could decrease demand for some of our products and services.
A portion of our revenue historically has been generated by end-users in the oil and gas markets where we serve customers in the petroleum industry—primarily midstream transportation and downstream refining. The businesses of most of our customers in the energy industry are, to varying degrees, cyclical and historically have experienced periodic downturns. Profitability in the energy industry is highly sensitive to supply and demand cycles and commodity prices, which historically have been volatile, and our customers in this industry have tended to delay large capital projects, including expensive maintenance and upgrades, during industry downturns. Customer project delays and cancellations may limit our ability to realize value from our backlog as expected and cause fluctuations in the timing or the amount of revenue earned and the profitability of our business in a particular period. In addition, such delays and cancellations may lead to significant fluctuations in results of operations from quarter to quarter, making it difficult to predict our financial performance on a quarterly basis.

Demand for a portion of our products and services depends upon the level of capital expenditure by companies in the energy industry, which depends, in part, on energy prices. Prices of oil and gas are volatile and within recent years, the price of crude oil has declined significantly. We have experienced suspensions or delays in large capital projects within the energy sector, especially in the upstream exploration and production sector, and most notably in Canada. A sustained downturn in the capital expenditures of our customers, whether due to a decrease in the market price of oil and gas or otherwise, may delay projects, decrease demand for our products and services and cause downward pressure on the prices we charge, which, in turn, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to identify, finance and complete suitable acquisitions and investments, and any completed acquisitions and investments could be unsuccessful or consume significant resources.
Our business strategy includes acquiring businesses and making investments that complement our existing business. We expect to analyze and evaluate the acquisition of strategic businesses or product lines with the potential to extend or strengthen our industry position or enhance our existing set of product and service offerings. We may not be able to identify suitable acquisition candidates, obtain financing or have sufficient cash necessary for acquisitions or successfully complete acquisitions in the future. Acquisitions and investments may involve significant cash expenditures, debt incurrences, equity issuances, operating losses and expenses. Acquisitions involve numerous other risks, including:

- diversion of management time and attention from daily operations;
- difficulties integrating acquired businesses, technologies and personnel into our business;
- difficulties in obtaining and verifying the financial statements and other business information of acquired businesses;
- inability to obtain required regulatory approvals;
- potential loss of key employees, key contractual relationships or key customers of acquired companies or of ours;
- assumption of the liabilities and exposure to unforeseen liabilities of acquired companies; and
- dilution of interests of holders of nVent ordinary shares through the issuance of equity securities or equity-linked securities.

It may be difficult for us to complete transactions quickly and to integrate acquired operations efficiently into our business operations. Any acquisitions or investments may not be successful and may ultimately result in impairment charges and have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not achieve some or all of the expected benefits of our business initiatives.
During 2021, 2020 and 2019, we continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business. In order to align our resources with our growth strategies, operate more efficiently and control costs, we may periodically announce in the future restructuring plans, which may include workforce reductions, global plant closures and consolidations, asset impairments and other cost reduction initiatives. As these plans and actions are complex, we may not be able to achieve the operating efficiencies to reduce costs or realize benefits that were anticipated in connection with these initiatives. If we are unable to execute these initiatives as planned, we may not realize all or any of the anticipated benefits, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our backlog may fluctuate and material amounts of cancellations or reductions of orders or a failure to deliver our backlog on time could affect our future sales.
Our backlog is comprised of the portion of firm signed purchase orders or other written contractual commitments received from customers that we have not recognized as revenue. Backlog may increase or decrease based on the addition of large multi-year projects and their subsequent completion. Backlog may also be favorably or unfavorably affected by foreign currency rate fluctuations. The dollar amount of backlog as of December 31, 2021 was $558.5 million. The timing of our recognition of revenue out of our backlog is subject to a variety of factors that may cause delays, many of which, including fluctuations in our customers' delivery schedules, are beyond our control. Such delays may lead to significant fluctuations in results of operations from quarter to quarter, making it difficult to predict our financial performance on a quarterly basis. Further, while we have historically experienced few order cancellations and the amount of order cancellations has not been material compared to our total contract volume, if we were to experience a significant amount of cancellations of or reductions in purchase orders, it

would reduce our backlog and, consequently, our future sales and could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our future revenue depends in part on our ability to bid and win new contracts.
Our future revenue and overall results of operations require us to successfully bid on new contracts and, in particular, contracts for large greenfield projects, which are frequently subject to competitive bidding processes. Our revenue from major projects depends in part on the level of capital expenditures in some of our principal end markets, including the energy, chemical processing and power generation industries. The number of such projects we win in any year fluctuates, and is dependent upon the number of projects available and our ability to bid successfully for such projects. Contract proposals and negotiations are complex and frequently involve a lengthy bidding and selection process, which is affected by a number of factors, such as competitive position, market conditions, financing arrangements and required governmental approvals. If negative market conditions arise, or if we fail to secure adequate financial arrangements or required governmental approvals, we may not be able to pursue particular projects or win new contracts, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We are exposed to political, regulatory, economic and other risks that arise from operating a multinational business.
Sales outside of the U.S. for the year ended December 31, 2021 accounted for approximately 43% of our net sales. Further, our business obtains some products, components and raw materials from non-U.S. suppliers. Accordingly, our business is subject to the political, regulatory, economic and other risks that are inherent in operating in numerous countries. These risks include:

- the imposition of tariffs, exchange controls or other trade restrictions;
- changes in general economic and political conditions in countries where we operate, particularly in emerging markets;
- relatively more severe economic conditions in some international markets than in the U.S.;
- the difficulty of enforcing agreements and collecting receivables through non-U.S. legal systems;
- the difficulty of communicating and monitoring standards and directives across our global facilities;
- trade protection measures and import or export licensing requirements and restrictions;
- the possibility of terrorist action or military conflict affecting us or our operations;
- the threat of nationalization and expropriation;
- difficulty in staffing and managing widespread operations in non-U.S. labor markets;
- changes in tax treaties, laws or rulings that could have a material adverse impact on our effective tax rate;
- limitations on repatriation of earnings;
- the difficulty of protecting intellectual property in non-U.S. countries; and
- changes in and required compliance with a variety of non-U.S. laws and regulations.

Our success depends in part on our ability to anticipate and effectively manage these and other risks. We cannot assure you that these and other factors will not have a material adverse effect on our international operations or on our business as a whole.

A disruption in the availability, price or quality of products or materials that we manufacture and source from various countries throughout the world could have a material adverse effect on our results of operations.
Our business is subject to risks associated with global manufacturing and sourcing. We use a variety of raw materials in the production of our products including steel, copper, aluminum, paints and resins. We also purchase certain electrical and electronic components and packaging materials from a number of suppliers. During 2021, we experienced supply chain challenges, including increased lead times, due to availability constraints and high demand, and we expect supply chain pressures to continue in 2022. Although we regularly monitor the financial health and operations of companies in our supply chain, and use alternative suppliers when necessary and available, supply chain constraints could cause a disruption in our ability to obtain raw materials or components required to manufacture our products and adversely affect our operations. Significant shortages in the availability of these materials or price increases could increase our operating costs and adversely

impact the competitive positions of our products. We rely on materials, components and finished goods that are sourced from or manufactured outside the U.S., including Mexico, China and other countries, and these countries may experience political or trade instability, which could disrupt our supply of products or materials. We rely on our suppliers to produce high quality materials, components and finished goods according to our specifications. Although we have quality control procedures in place, there is a risk that products may not meet our specifications which could impact our ability to ship quality products to our customers on a timely basis.

Our Thermal Management segment's dependence on subcontractors and third party suppliers and manufacturers with respect to projects could have a material adverse effect on us.

Our Thermal Management segment often relies on third party subcontractors as well as third party suppliers and manufacturers to complete projects. To the extent that we cannot engage subcontractors or acquire supplies or materials from third parties for these projects, our ability to complete a project in a timely fashion or at a profit may be impaired. If the amount we are required to pay for these goods and services exceeds the amount we have estimated in bidding for fixed-price contracts, we could experience losses on these contracts. In addition, if a subcontractor, supplier or manufacturer is unable to deliver its services or materials according to the negotiated contract terms for any reason, including the deterioration of its financial condition or over-commitment of its resources, we may be required to purchase the services or materials from another source at a higher price. This may reduce the profit to be realized or result in a loss on a project for which the services or materials were needed.

We may experience material cost and other inflation.

During 2021, we experienced inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand, and we expect inflationary cost increases to continue in 2022. We strive for productivity improvements and implement increases in selling prices to help mitigate cost increases in raw materials, freight, energy, wage and other costs such as pension, health care and insurance. We continue to implement operational initiatives in order to mitigate the impact of this inflation and continuously reduce our costs. However, these actions may not be successful in managing our costs or increasing our productivity. Continued cost inflation or failure of our initiatives to increase prices, generate cost savings or improve productivity could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Intellectual property challenges may hinder our ability to develop, engineer and market our products.

Patents, non-compete agreements, proprietary technologies, customer relationships, trademarks, trade names and brand names are important to our business. Intellectual property protection, however, may not preclude competitors from developing products similar to ours or from challenging our names or products. Our pending patent applications, and our pending copyright and trademark registration applications, may not be allowed or competitors may challenge the validity or scope of our patents, copyrights or trademarks. In addition, our patents, copyrights, trademarks and other intellectual property rights may not provide us a significant competitive advantage. Over the past few years, we have noticed an increasing tendency for participants in our markets to use challenges to intellectual property as a means to compete. Patent and trademark challenges increase our costs to develop, engineer and market our products. We may need to spend significant resources monitoring our intellectual property rights and we may or may not be able to detect infringement by third parties. If we fail to successfully enforce our intellectual property rights or register new patents, our competitive position could suffer, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We have significant goodwill and intangible assets and future impairment of our goodwill and intangible assets could have a material adverse effect on our results of operations.

We test goodwill and other indefinite-lived intangible assets for impairment on at least an annual basis, and more frequently if circumstances warrant, by comparing the estimated fair value of our reporting unit to its respective carrying values on its balance sheets. As of December 31, 2021, our goodwill and intangible assets were $3.3 billion and represented 71% of our total assets. Changes in economic and operating conditions impacting the assumptions used in our impairment tests could result in future goodwill and intangible asset impairment expense.

Risks Relating to Legal, Regulatory and Compliance Matters

Changes in U.S. and foreign government administrative policy, including changes to existing trade agreements and U.S government sanctions, could have a material adverse effect on us.

As a result of changes to U.S. and foreign government administrative policy, there may be changes to existing trade agreements, greater restrictions on free trade generally, significant increases in tariffs on goods imported into the U.S. particularly tariffs on products manufactured in China, Canada and Mexico, among other possible changes.

In addition, from time to time, the U.S. government has imposed sanctions restricting U.S. companies from conducting business with specified non-U.S. individuals and companies. For example, the U.S. government has imposed sanctions through several executive orders and legislation restricting U.S. companies from conducting business with specified Russian and Ukrainian

individuals and companies. The sanctions imposed by the U.S. government may be expanded in the future to restrict or further restrict us from engaging with customers or vendors. If we are unable to conduct business with new or existing customers or vendors or pursue business opportunities in Russia or Ukraine, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Changes in U.S. social, political, regulatory and economic conditions or in laws and policies governing foreign trade, manufacturing, development and investment in the territories and countries where we currently manufacture and sell products, and any resulting negative sentiments towards the U.S. as a result of such changes, could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Violations of the U.S. Foreign Corrupt Practices Act and similar anti-corruption laws outside the U.S. or international trade compliance regulations could have a material adverse effect on us.

The U.S. Foreign Corrupt Practices Act and similar anti-corruption laws in other jurisdictions generally prohibit companies and their intermediaries from making improper payments to government officials or other persons for the purpose of obtaining or retaining business. We operate in many parts of the world that are recognized as having governmental and commercial corruption and in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices. Because many of our customers and end users are involved in infrastructure construction and energy production, they are often subject to increased scrutiny by regulators.

Further, our global operations require importing and exporting goods and technology across international borders on a regular basis. Certain of the products we manufacture are “dual use” products, which are products that may have both civil and military applications, or may otherwise be involved in weapons proliferation, and are often subject to more stringent export controls. From time to time, we may obtain or receive information alleging improper activity in connection with imports or exports.

Our policies mandate strict compliance with applicable laws and regulations, including those pertaining to anti-corruption, anti-bribery and trade. However, even when we are in strict compliance with law and our policies, we may suffer reputational damage if certain of our products are sold through various intermediaries to entities operating in sanctioned countries. We cannot assure that our internal control policies and procedures will always protect us from reckless or criminal acts committed by our employees or third-party intermediaries. In the event that we believe or have reason to believe that our employees or agents have or may have violated applicable laws, we may be required to investigate or have outside counsel investigate the relevant facts and circumstances, which can be expensive and require significant time and attention from senior management. Violations of these laws may require self-disclosure to governmental agencies and result in criminal or civil sanctions, which could disrupt our business, cause denial of import or export privileges, and result in a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

We are exposed to potential environmental laws, liabilities and litigation.

We are subject to U.S. federal, state, local and non-U.S. laws and regulations governing our environmental practices, public and worker health and safety, and the indoor and outdoor environment. Compliance with these environmental, health and safety regulations could require us to satisfy environmental liabilities, increase the cost of manufacturing our products or otherwise have a material adverse effect on our business, financial condition, results of operations and cash flows. Any violations of these laws by us could cause us to incur unanticipated liabilities. We are also required to comply with various environmental laws and maintain permits, some of which are subject to renewal from time to time, for many of our businesses and we could suffer if we are unable to renew existing permits or to obtain any additional permits that we may require. Compliance with environmental requirements also could require significant operating or capital expenditures or result in significant operational restrictions. We cannot assure you that we have been or will be at all times in compliance with environmental and health and safety laws. If we violate these laws, we could be fined, criminally charged or otherwise sanctioned by regulators.

We have been named as defendant, target or a potentially responsible party ("PRP") in a number of environmental cleanups relating to our current or former business units. We may be named as a PRP at other sites in the future for existing business units, as well as both divested and acquired businesses. In addition to clean-up actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances. Certain environmental laws impose liability on current or previous owners or operators of real property for the cost of removal or remediation of hazardous substances at their properties or at properties at which they have disposed of hazardous substances. The cost of clean-up and other environmental liabilities can be difficult to accurately predict. In addition, environmental requirements change and tend to become more stringent over time. Our eventual environmental clean-up costs and liabilities could exceed the amount of our current reserves.

We may incur significant costs in our efforts to successfully avoid, manage, defend and litigate intellectual property matters. From time to time, we receive notices from third parties alleging intellectual property infringement. Any dispute or litigation involving intellectual property could be costly and time-consuming due to the complexity and the uncertainty of intellectual property litigation. Our intellectual property portfolio may not be useful in asserting a counterclaim, or negotiating a license, in response to a claim of infringement or misappropriation. In addition, as a result of such claims, we may lose our rights to utilize critical technology, may be required to pay substantial damages or license fees with respect to the infringed rights or may be required to redesign our products at a substantial cost, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We are exposed to certain regulatory and financial risks related to climate change and other sustainability matters. Climate change is receiving ever increasing attention worldwide. Many scientists, legislators and others attribute global warming to increased levels of greenhouse gases, which has led to significant legislative and regulatory efforts to limit greenhouse gas emissions. The U.S. Environmental Protection Agency ("EPA") has published findings that emissions of carbon dioxide, methane, and other greenhouse gases ("GHGs") present an endangerment to public health and the environment because emissions of such gases are, according to the EPA, contributing to the warming of the earth's atmosphere and other climate changes. Based on these findings, the EPA has implemented regulations that require reporting of GHG emissions, or that limit emissions of GHGs from certain mobile or stationary sources. In addition, the U.S. Congress and federal and state regulatory agencies have considered other legislation and regulatory proposals to reduce emissions of GHGs, and many states have already taken legal measures to reduce emissions of GHGs, primarily through the development of GHG inventories, GHG permitting and/or regional GHG cap-and-trade programs. It is uncertain whether, when and in what form a federal mandatory carbon dioxide emissions reduction program, or other state programs, may be adopted. Similarly, certain countries have adopted the Kyoto Protocol and in February 2021, the U.S. rejoined the Paris Accord, and these and other existing international initiatives or those under consideration could affect our international operations. To the extent our customers, particularly our energy and industrial customers, are subject to any of these or other similar proposed or newly enacted laws and regulations, we are exposed to risks that the additional costs incurred by customers to comply with such laws and regulations could impact their ability or desire to continue to operate at similar levels in certain jurisdictions as historically seen or as currently anticipated, which could negatively impact their demand for our products and services. These actions could also increase costs associated with our operations, including costs for raw materials and transportation. Because it is uncertain what laws will be enacted, we cannot predict the potential impact of such laws on our future financial condition, results of operations and cash flows.

In addition, as part of our strategy regarding climate change and sustainability matters, we have set and may set additional targets aimed at reducing our impact on the environment and climate change and/or targets relating to other sustainability matters. It is possible that we may not be able to achieve such targets or our desired impact, which may cause us to suffer from reputational damage or our business or financial condition could be adversely affected. It is also possible that actions we take to achieve our strategy or targets could result in increased costs to our operations. In addition, investors and other stakeholders are increasingly focused on environmental, social and governance ("ESG") matters, and as stakeholder ESG expectations and standards are evolving, our failure to sufficiently response to these evolving standards and expectations may cause us to suffer from reputational damage or our business or financial condition could be adversely affected.

Increased information technology security threats and computer crime pose a risk to our systems, networks, products and services, and we are exposed to potential regulatory, financial and reputational risks relating to the protection of our data. We rely upon information technology systems and networks in connection with a variety of business activities, some of which are managed by third parties. Additionally, we collect and store data that is sensitive to us and our employees, customers, distributors and suppliers. As our business increasingly interfaces with employees, customers, distributors and suppliers using information technology systems and networks, we are subject to an increased risk to the secure operation of these systems and networks and to additional laws and regulatory requirements regarding data privacy, including the European Union General Data Protection Regulation. The secure operation of these information technology systems and networks, and the processing and maintenance of this data is critical to our business operations and strategy. Information technology security threats are increasing in frequency and sophistication. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of the data we process and maintain and pose a risk of theft to our assets. Establishing systems and processes to address these threats and changes in legal requirements relating to data collection and storage may increase our costs. We have experienced data breaches, and, although we have determined such data breaches to be immaterial and such data breaches have not had a material adverse effect on our financial condition, results of operations or cash flows, there can be no assurance of similar results in the future. Should future attacks succeed in the theft of assets, exporting sensitive data or financial information or controlling sensitive systems or networks, it could expose us and our employees, customers, distributors and suppliers to the theft of assets, misuse of information or systems, the compromising of confidential information, manipulation and destruction of data, defective products, production downtimes and operations disruptions, and breach of privacy, which may require notification under data privacy and other applicable laws. The occurrence of any of these events could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows. In addition, such breaches in security could result in litigation, regulatory action and potential liability and the costs and operational consequences of implementing further data protection measures.

We may be negatively impacted by litigation, including product liability claims.
We are currently, and may in the future, become subject to litigation and other claims. We have been made parties to a number of actions filed or have been given notice of potential claims relating to the conduct of our business, including those pertaining to commercial disputes, product liability, asbestos, environmental, safety and health, patent infringement and employment matters. The outcome of such legal proceedings cannot be predicted with certainty and some may be disposed of unfavorably to us. Our business exposes us to potential litigation, such as product liability claims relating to the design, manufacture and sale of our products. While we currently maintain what we believe to be suitable product liability insurance, we may not be able to maintain this insurance on acceptable terms and this insurance may not provide adequate protection against potential or previously existing liabilities. In addition, we self-insure a portion of product liability claims. Successful claims against us for significant amounts could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

If the distribution from Pentair fails to qualify as a tax-free transaction for U.S. federal income tax purposes, then we and our shareholders could be subject to significant tax liability or tax indemnity obligations.
Pentair received an IRS Ruling from the IRS substantially to the effect that, among other things, the distribution and certain related transactions qualify as tax-free under Section 355 and related provisions of the Code. The tax-free nature of the distribution was conditioned on the continued validity of the IRS Ruling, as well as on receipt of a tax opinion, substantially to the effect that, among other things, the distribution would qualify as a tax-free transaction under Section 355 and related provisions of the Code, and certain transactions related to the transfer of assets and liabilities to us in connection with the separation and distribution would not result in the recognition of any gain or loss to Pentair, us or our shareholders. The IRS ruling and the tax opinion relied on certain facts and assumptions, certain representations from Pentair and us regarding the past and future conduct of both businesses and other matters, and the tax opinion relies on the IRS Ruling. Notwithstanding the IRS ruling and tax opinion, the IRS could determine on audit that the distribution should be treated as a taxable transaction if it determines that any of these facts, assumptions, representations or undertakings is not correct or has been violated, or that the distribution should be taxable for other reasons, including as a result of a significant change in stock or asset ownership after the distribution, or if the IRS were to disagree with the conclusions of the tax opinion that are not covered by the IRS ruling. If the distribution is ultimately determined to be taxable, the distribution could be treated as a taxable dividend to you for U.S. federal income tax purposes, and you could incur significant U.S. federal income tax liability. In addition, Pentair and/or we could incur significant U.S. federal income tax liabilities or tax indemnification obligations, whether under applicable law or the tax matters agreement that we entered into with Pentair, if it is ultimately determined that certain related transactions undertaken in anticipation of the distribution are taxable. To the extent we incur any tax liability or indemnification obligation under applicable law or the tax matters agreement, there could be a material adverse effect on our business, financial condition and results of operations and cash flows in future reporting periods.

Risks Relating to Financial Markets and Our Debt and Liquidity

Volatility in currency exchange rates could have a material adverse effect on our financial condition, results of operations and cash flows.
Sales outside of the U.S. for the year ended December 31, 2021 accounted for approximately 43% of our net sales. Our financial statements reflect translation of items denominated in non-U.S. currencies to U.S. dollars. Therefore, if the U.S. dollar strengthens in relation to the principal non-U.S. currencies from which we derive revenue as compared to a prior period, our U.S. dollar-reported revenue and income will effectively be decreased to the extent of the change in currency valuations and vice-versa. For the year ended December 31, 2021, foreign currency translations had a 2% positive impact on our net sales. Fluctuations in foreign currency exchange rates, most notably the strengthening of the U.S. dollar against the euro, could have a material adverse effect on our reported revenue and income in future periods.

Disruptions in the financial markets could adversely affect us, our customers and our suppliers by increasing funding costs or reducing availability of credit.

In the normal course of our business, we may access credit markets for general corporate purposes, which may include repayment of indebtedness, acquisitions, additions to working capital, repurchase of shares, capital expenditures and investments in our subsidiaries. Although we expect to have sufficient liquidity to meet our foreseeable needs, our access to and the cost of capital could be negatively impacted by disruptions in the credit markets, which have occurred in the past and made financing terms for borrowers unattractive or unavailable. These factors may make it more difficult or expensive for us to access credit markets if the need arises. In addition, these factors may make it more difficult for our suppliers to meet demand for their products or for prospective customers to commence new projects, as customers and suppliers may experience increased costs of debt financing or difficulties in obtaining debt financing. Disruptions in the financial markets in the past have had adverse effects on other areas of the economy and have led to a slowdown in general economic activity that may adversely affect our businesses. One or more of these factors could adversely affect our business, financial condition, results of operations and cash flows.

Covenants in our debt instruments may adversely affect us.

Our credit agreements and indentures contain customary financial covenants, including those that limit the amount of our debt, which may restrict the operations of our business and our ability to incur additional debt to finance acquisitions. Our ability to meet the financial covenants can be affected by events beyond our control, and we cannot provide assurance that we will meet those tests. A breach of any of these covenants could result in a default under our credit agreements or indentures. Upon the occurrence of an event of default under any of our credit facilities or indentures, the lenders or trustees could elect to declare all amounts outstanding thereunder to be immediately due and payable and, in the case of credit facility lenders, terminate all commitments to extend further credit. If the lenders or trustees accelerate the repayment of borrowings, we cannot provide assurance that we will have sufficient assets to repay our credit facilities and our other indebtedness. Furthermore, acceleration of any obligation under any of our material debt instruments will permit the holders of our other material debt to accelerate their obligations, which could have a material adverse effect on our financial condition.

Our indebtedness, and any future increase in debt or raising of additional capital, could affect our financial condition, and may decrease our profitability.

As of December 31, 2021, we had $1.0 billion of total debt outstanding. If we are not able to repay or refinance our debt as it becomes due, we may be forced to sell assets or take other disadvantageous actions, including (i) reducing financing in the future for working capital, capital expenditures and general corporate purposes or (ii) dedicating an unsustainable level of our cash flow from operations to the payment of principal and interest on our indebtedness. The lenders who hold such debt could also accelerate amounts due, which could potentially trigger a default or acceleration of any of our other debt.

Further, we may increase our debt or raise additional capital in the future, subject to restrictions in our debt agreements. If our cash flow from operations is less than we anticipate, if our cash requirements are more than we expect, or if we intend to finance acquisitions, we may require more financing. However, debt or equity financing may not be available to us on acceptable terms, if at all. If we incur additional debt or raise equity through the issuance of additional capital shares, the terms of the debt or capital shares issued may give the holders rights, preferences and privileges senior to those of holders of our ordinary shares, particularly in the event of liquidation. The terms of the debt may also impose additional and more stringent restrictions on our operations than we currently have. If we raise funds through the issuance of additional equity, the percentage ownership of existing shareholders in our company would decline. If we are unable to raise additional capital when needed, our financial condition could be adversely affected. Unfavorable changes in the ratings that rating agencies assign to our debt may ultimately negatively impact our access to the debt capital markets and increase the costs we incur to borrow funds. If ratings for our debt are downgraded, our access to the debt capital markets may become restricted. Additionally, our credit agreements generally include an increase in interest rates if the ratings for our debt are downgraded.

Risks Relating to Our Jurisdiction of Incorporation in Ireland and Tax Residency in the U.K.

We are subject to changes in law and other factors that may not allow us to maintain a worldwide effective corporate tax rate that is competitive in our industry.

While we believe that we should be able to maintain a worldwide effective corporate tax rate that is competitive in our industry, we cannot give any assurance as to what our effective tax rate will be in the future, because of, among other things, uncertainty regarding the tax policies of the jurisdictions where we operate. Our actual effective tax rate may vary from our expectation and that variance may be material. Also, the tax laws of the U.S., the U.K., Ireland and other jurisdictions could change in the future, and such changes could cause a material change in our worldwide effective corporate tax rate. In particular, legislative action could be taken by the U.S., the U.K., Ireland or the European Union which could override tax treaties or modify tax statutes or regulations upon which we expect to rely and adversely affect our effective tax rate. We cannot predict the outcome of any specific legislative proposals. If proposals were enacted that had the effect of disregarding our incorporation in Ireland or limiting our ability as an Irish company to maintain tax residency in the U.K. and take advantage of the tax treaties among the U.S., the U.K. and Ireland, we could be subject to increased taxation, which could materially adversely affect our financial condition, results of operations, cash flows or our effective tax rate in future reporting periods.

A change in our tax residency could have a negative effect on our future profitability, and may trigger taxes on dividends or exit charges.

We are incorporated in Ireland and we are an Irish tax resident under Irish domestic law unless we are regarded as being resident elsewhere (and not Ireland) under the terms of a double tax treaty. Under domestic U.K. law, a company that is centrally managed and controlled in the U.K. is regarded as resident in the U.K. for taxation purposes unless it is treated as resident in another jurisdiction pursuant to any appropriate double tax treaty with the U.K. Other jurisdictions may also seek to assert taxing jurisdiction over us.

Effective for tax periods beginning on or after November 1, 2019, where a company is treated as tax resident under the domestic laws of both the U.K. and Ireland, the Double Tax Convention between the U.K. and Ireland (the "Convention") signed on June 2, 1976, and as modified by paragraph 1 of Article 4 of the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (the "Multilateral Instrument" or "MLI") provides that the residence of a dual-resident entity should be determined by way of mutual agreement between the Irish Revenue Commissioners and Her Majesty's Revenue Commissioners. The tie-breaker test provides that, in cases of dual residence, the competent authorities of the two states shall determine by mutual agreement the territory of which the person shall be deemed to be resident for purposes of the Convention.

Our application under the Mutual Agreement Procedure provided for in Article 24 of the Convention (as amended pursuant to the MLI) seeking confirmation that we will continue to be tax resident solely in the U.K. was approved by the competent authorities of the U.K. and Ireland effective December 31, 2019.

It is possible that in the future, whether as a result of a change in law or the practice of any relevant tax authority or as a result of any change in the conduct of our affairs, we could become, or be regarded as having become, resident in a jurisdiction other than the U.K. If we cease to be resident in the U.K. and become resident in another jurisdiction, we may be subject to U.K. exit charges, and could become liable for additional tax charges in the other jurisdiction (including dividend withholding taxes or corporate income tax charges). If we were to be treated as resident in more than one jurisdiction, we could be subject to taxation in multiple jurisdictions. If, for example, we were considered to be a tax resident of Ireland, we could become liable for Irish corporation tax and any dividends paid by us could be subject to Irish dividend withholding tax.

Legislative action in the U.S. could materially adversely affect us.

Legislative or administrative action may be taken by the U.S. Congress or U.S. Treasury which, if ultimately enacted or finalized, could limit the availability of tax benefits or deductions that we currently claim, override tax treaties upon which we rely, or otherwise affect the taxes that the U.S. imposes on our worldwide operations. Such changes could materially adversely affect our effective tax rate and/or require us to take further action, at potentially significant expense, to seek to preserve our effective tax rate.

Irish law differs from the laws in effect in the U.S. and may afford less protection to holders of our securities.
It may not be possible to enforce court judgments obtained in the U.S. against us in Ireland based on the civil liability provisions of the U.S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the U.S. federal or state securities laws or hear actions against us or those persons based on those laws. We have been advised that the U.S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U.S. federal or state court based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Ireland.

As an Irish company, we are governed by the Companies Act 2014, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the U.S.

In addition, our articles of association provide that the Irish courts have exclusive jurisdiction to determine any and all derivative actions in which a holder of nVent ordinary shares asserts a claim in the name of nVent, actions asserting a claim of breach of a fiduciary duty of any of the directors of nVent and actions asserting a claim arising pursuant to any provision of Irish law or our articles of association. Under Irish law, the proper claimant for wrongs committed against nVent, including by our directors, is considered to be nVent itself. Irish law permits a shareholder to initiate a lawsuit on behalf of a company such as nVent only in limited circumstances and requires court permission to do so.

Transfers of nVent ordinary shares may be subject to Irish stamp duty.
Transfers of nVent ordinary shares effected by means of the transfer of book entry interests in the Depository Trust Company ("DTC") will not be subject to Irish stamp duty. However, if you hold your nVent ordinary shares directly, rather than beneficially through DTC, any transfer of your nVent ordinary shares could be subject to Irish stamp duty (currently at the rate of 1 percent of the higher of the price paid or the market value of the shares acquired). Payment of Irish stamp duty is generally a legal obligation of the transferee.

We currently intend to pay (or cause one of our affiliates to pay) stamp duty in connection with share transfers made in the ordinary course of trading by a seller who holds shares directly to a buyer who holds the acquired shares beneficially. In other cases we may, in our absolute discretion, pay (or cause one of our affiliates to pay) any stamp duty. Our constitution provides that, in the event of any such payment, we (i) may seek reimbursement from the buyer, (ii) will have a lien against the shares acquired by such buyer and any dividends paid on such shares and (iii) may set-off the amount of the stamp duty against future dividends on such shares. Parties to a share transfer may assume that any stamp duty arising in respect of a transaction in nVent ordinary shares has been paid unless one or both of such parties is otherwise notified by us.

nVent ordinary shares, received by means of a gift or inheritance, could be subject to Irish capital acquisitions tax.
Irish capital acquisitions tax (“CAT”) could apply to a gift or inheritance of nVent ordinary shares irrespective of the place of residence, ordinary residence or domicile of the parties. This is because nVent ordinary shares will be regarded as property situated in Ireland. The person who receives the gift or inheritance has primary liability for CAT. Gifts and inheritances passing between spouses are exempt from CAT. Children have a tax-free threshold which Irish Revenue typically updates annually in respect of taxable gifts or inheritances received from their parents.

General Risk Factors

Our share price may fluctuate significantly.
We cannot predict the prices at which nVent ordinary shares may trade. The market price of nVent ordinary shares may fluctuate widely, depending on many factors, some of which may be beyond our control, including:

- actual or anticipated fluctuations in our results of operations due to factors related to our business;
- success or failure of our business strategy;
- our quarterly or annual earnings, or those of other companies in our industry;

- our ability to obtain third-party financing as needed;
- announcements by us or our competitors of significant acquisitions or dispositions;
- changes in accounting standards, policies, guidance, interpretations or principles;
- changes in earnings estimates by us or securities analysts or our ability to meet those estimates;
- the operating and share price performance of other comparable companies;
- investors' perceptions of us;
- natural or other environmental disasters that investors believe may affect us;
- overall market fluctuations;
- results from any material litigation, including government investigations or environmental liabilities;
- changes in laws and regulations affecting our business; and
- general economic conditions and other external factors.

Stock markets in general have experienced volatility that has often been unrelated to the operating performance of a particular company. These broad market fluctuations could have a material adverse effect on our share price.

Our success depends on attracting and retaining qualified personnel.
Our ability to sustain and grow our business requires us to hire, retain and develop a highly skilled and diverse management team and workforce. Failure to ensure that we have the depth and breadth of personnel with the necessary skill set and experience, or the loss of key employees, could impede our ability to deliver our growth objectives and execute our strategy.

Catastrophic and other events beyond our control may disrupt operations at our manufacturing facilities and those of our suppliers, which could cause us to be unable to meet customer demands or increase our costs or reduce customer spending.
If operations at any of our manufacturing facilities or those of our suppliers were to be disrupted as a result of significant equipment failures, natural disasters, earthquakes, power outages, fires, explosions, terrorism, adverse weather conditions, labor disputes, public health epidemics or other catastrophic events or events outside of our control, we may be unable to fill customer orders and otherwise meet customer demand for our products. In addition, these types of events may negatively impact consumer, commercial and industrial spending in impacted regions or, depending on the severity, globally. As a result, any of such events could have a material adverse effect our business, financial condition, results of operations and cash flows. Interruptions in production, in particular at our manufacturing facilities, could increase our costs and reduce our sales. Any interruption in production capability could require us to make substantial capital expenditures to fill customer orders. We maintain property damage insurance that we believe to be adequate to provide for reconstruction of facilities and equipment, as well as business interruption insurance to mitigate losses resulting from any production interruption or shutdown caused by an insured loss. However, any recovery under our insurance policies may not offset the lost sales or increased costs that may be experienced during the disruption of operations, which could have a material adverse effect our business, financial condition, results of operations and cash flows.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal office is located in leased premises in London, U.K., and our management office in the U.S. is located in leased premises in Minneapolis, Minnesota.

Our key operations are conducted in manufacturing and distribution facilities throughout the world. The following is a summary of our principal manufacturing, distribution, and service center properties:

		Number of Facilities		
	Manufacturing Plant Locations	**Manufacturing Plants**	**Distribution Facilities**	**Service Centers**
Enclosures	U.S. and 9 other countries	19	10	—
Electrical & Fastening Solutions	U.S. and 2 other countries	8	6	—
Thermal Management	U.S. and 2 other countries	4	6	4

We believe that our production facilities are suitable for their purpose and are adequate to support our businesses.

ITEM 3. LEGAL PROCEEDINGS

We have been made parties to a number of actions filed or have been given notice of potential claims relating to the conduct of our business, including those pertaining to commercial disputes, product liability, asbestos, environmental, safety and health, patent infringement and employment matters.

While we believe that a material impact on our financial position, results of operations or cash flows from any such future claims or potential claims is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future adverse ruling or unfavorable development could result in future charges that could have a material adverse impact. We do and will continue to periodically reexamine our estimates of probable liabilities and any associated expenses and receivables and make appropriate adjustments to such estimates based on experience and developments in litigation. As a result, the current estimates of the potential impact on our financial position, results of operations and cash flows for the proceedings and claims described in the notes to our consolidated financial statements could change in the future.

Environmental matters

We have been named as defendant, target or a potentially responsible party ("PRP") in a number of environmental clean-ups relating to our current or former business units. We may be named as a PRP at other sites in the future for existing business units, as well as both divested and acquired businesses. In addition to clean-up actions brought by governmental authorities, private parties could bring personal injury or other claims due to the presence of, or exposure to, hazardous substances.

Certain environmental laws impose liability on current or previous owners or operators of real property for the cost of removal or remediation of hazardous substances at their properties or at properties at which they have disposed of hazardous substances. Our accruals for environmental matters are recorded on a site-by-site basis when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. It can be difficult to estimate reliably the final costs of investigation and remediation due to various factors. In our opinion, the amounts accrued are appropriate based on facts and circumstances as currently known. As of December 31, 2021, our recorded reserves for environmental matters were not material. We do not anticipate these environmental conditions will have a material adverse effect on our financial position, results of operations or cash flows. However, unknown conditions, new details about existing conditions or changes in environmental requirements may give rise to environmental liabilities that will exceed the amount of our current reserves and could have a material adverse effect in the future.

Product liability claims

We are subject to various product liability lawsuits and personal injury claims. A substantial number of lawsuits and claims incurred prior to the effective date of the separation on April 30, 2018 are insured and accrued for by Pentair's captive insurance subsidiary. Lawsuits and claims incurred after the separation are insured and accrued for by Tonka Bay, a captive insurance subsidiary of nVent. For all other claims, accruals covering the claims are recorded, on an undiscounted basis, when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated based on existing information. The accruals are adjusted periodically as additional information becomes available. We have not experienced significant unfavorable trends in either the severity or frequency of product liability lawsuits or personal injury claims.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Current executive officers of nVent Electric plc, their ages, current position and their business experience during at least the past five years are as follows:

Name	Age	Current Position and Business Experience
Beth A. Wozniak	57	Chief Executive Officer since 2018; Ms. Wozniak was the President of Pentair's Electrical segment during 2017. Ms. Wozniak previously served as President of Pentair's Flow & Filtration Solutions Global Business Unit from 2015 – 2016. Ms. Wozniak was President of the Environmental and Combustion Controls unit of Honeywell International Inc. (a software-industrial company) from 2011 – 2015 and President of the Sensing and Controls Unit of Honeywell International Inc. from 2006 – 2011, and she held various leadership positions at Honeywell International Inc. and its predecessor AlliedSignal Inc. from 1990 – 2006.
Sara E. Zawoyski	47	Executive Vice President and Chief Financial Officer since 2019; Ms. Zawoyski was the Senior Vice President Finance and Treasurer of the Company from 2018 – 2019. Ms. Zawoyski previously served in the following roles at Pentair and its predecessors: Chief Financial Officer, Electrical Segment from 2017 – 2018, Chief Financial Officer, Flow and Filtration Solutions from 2015 – 2017, Chief Financial Officer Flow Technologies from 2014 – 2015, Chief Financial Officer, Equipment Protection from 2012 – 2014, and Vice President Investor Relations from 2010 – 2012. Ms. Zawoyski also previously held various investor relations and managerial finance leadership positions at PepsiAmericas from 2002 – 2010 and various positions in the audit practice of PricewaterhouseCoopers LLP from 1996 – 2002.
Jon D. Lammers	57	Executive Vice President and General Counsel and Secretary since 2018; Mr. Lammers served as Pentair's General Counsel, Electrical from 2017-2018 and was an attorney at Foulston Siefkin LLP (a Kansas-based law firm) from 2016 – 2017. Mr. Lammers previously served as Senior Vice President, General Counsel and Secretary of Spirit Aerosystems Holdings, Inc. (a designer and manufacturer of aerostructures) from 2012 – 2016. He held various senior legal roles, including Deputy North American General Counsel and Asia Pacific General Counsel with Cargill Inc. from 1997 – 2012. Prior to his corporate experience, Mr. Lammers practiced law at Oppenheimer, Wolff & Donnelly (n/k/a Fox Rothschild LLP) from 1993 – 1997 and Paul Hastings LLP from 1991 – 1993.
Lynnette R. Heath	54	Executive Vice President and Chief Human Resources Officer since 2018; Ms. Heath was the Senior Vice President, Global Human Resources of Entrust Datacard (a privately held global security and identity company) from 2009 – 2017. Ms. Heath previously held various human resources roles with General Electric Company from 2000 – 2009, with McKesson Corporation from 1996 – 2000 and with Northern States Power Company (n/k/a Xcel Energy Inc.) from 1992 – 1996.
Aravind Padmanabhan	53	Executive Vice President and Chief Technology Officer since 2019; Mr. Padmanabhan was the Vice President and Chief Technology Officer of the Honeywell Connected Worker unit of Honeywell International Inc. (a software-industrial company) from 2018 – 2019, and served as Acting Chief Architect of the Honeywell Sentience Platform in 2018. Mr. Padmanabhan previously served as Vice President and Chief Technology Officer of the Home & Building Technologies unit of Honeywell International Inc. from 2016 – 2018 and the Environmental & Energy Solutions unit of Honeywell International Inc. from 2013 – 2016. Mr. Padmanabhan also previously held various other technology and engineering leadership positions at Honeywell International Inc. from 1997 – 2013.
Randolph A. Wacker	57	Senior Vice President and Chief Accounting Officer since 2018 and Treasurer since 2019; Mr. Wacker was the Assistant Corporate Controller of Pentair and served in that role from 2005-2017. Mr. Wacker served as the U.S. Controller of Computer Network Technologies from 2004 – 2005. He served over 10 years in corporate controlling and external reporting roles in various public companies. Mr. Wacker also served as an accountant with the public accounting firm Larson, Allen, Weishair & Co., LLP (n/k/a CliftonLarsonAllen) from 1988 – 1993.
Joseph A. Ruzynski	46	President of Enclosures since 2018; Mr. Ruzynski was the Vice President of Pentair's Enclosures Strategic Business Unit and served in that role during 2017. Mr. Ruzynski previously served as Vice President of Pentair's Engineered Projects Strategic Business Group in its Valves & Controls Global Business Unit from 2016 – 2017 and Vice President of Pentair's Fluid Motion Business Group from 2015 – 2016. He was the Vice President, Operations of Pentair's Equipment Protection and Technical Solutions Global Business Units from 2012 – 2014, and held various supply leadership positions with Pentair from 2003 – 2012. Mr. Ruzynski was a Manager with Ernst & Young from 1997 – 2003.

Robert J. van der Kolk	53	President of Electrical & Fastening Solutions since 2018; Mr. van der Kolk was the Vice President of Pentair's Engineered & Fastening Solutions Strategic Business Unit of the Electrical segment and served in that role from 2015 – 2017. Mr. van der Kolk previously served as the Executive Vice President, Sales for ERICO from 2011 – 2015, and held various sales, development, and manufacturing leadership roles with ERICO from 2001 – 2008. Mr. van der Kolk held Plant Superintendent and Production Management roles for Cargill in the Netherlands and Germany from 1993 – 2001.
Michael B. Faulconer	52	President of Thermal Management since 2018; Mr. Faulconer was the Vice President of Pentair's Thermal Management Strategic Business Unit of the Electrical segment and served in that role during 2017. Mr. Faulconer previously served as the Vice President of Pentair's Thermal Building Solutions Unit from 2014 – 2016. He was the Vice President, Marketing of Pentair's Thermal Management Unit from 2010 – 2013. Mr. Faulconer held various general management and marketing leadership roles with Tyco Thermal Controls in the U.S. and Asia from 2001 – 2010. From 1991 – 2000, Mr. Faulconer held various sales roles with Valquip Corporation.

PART II

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

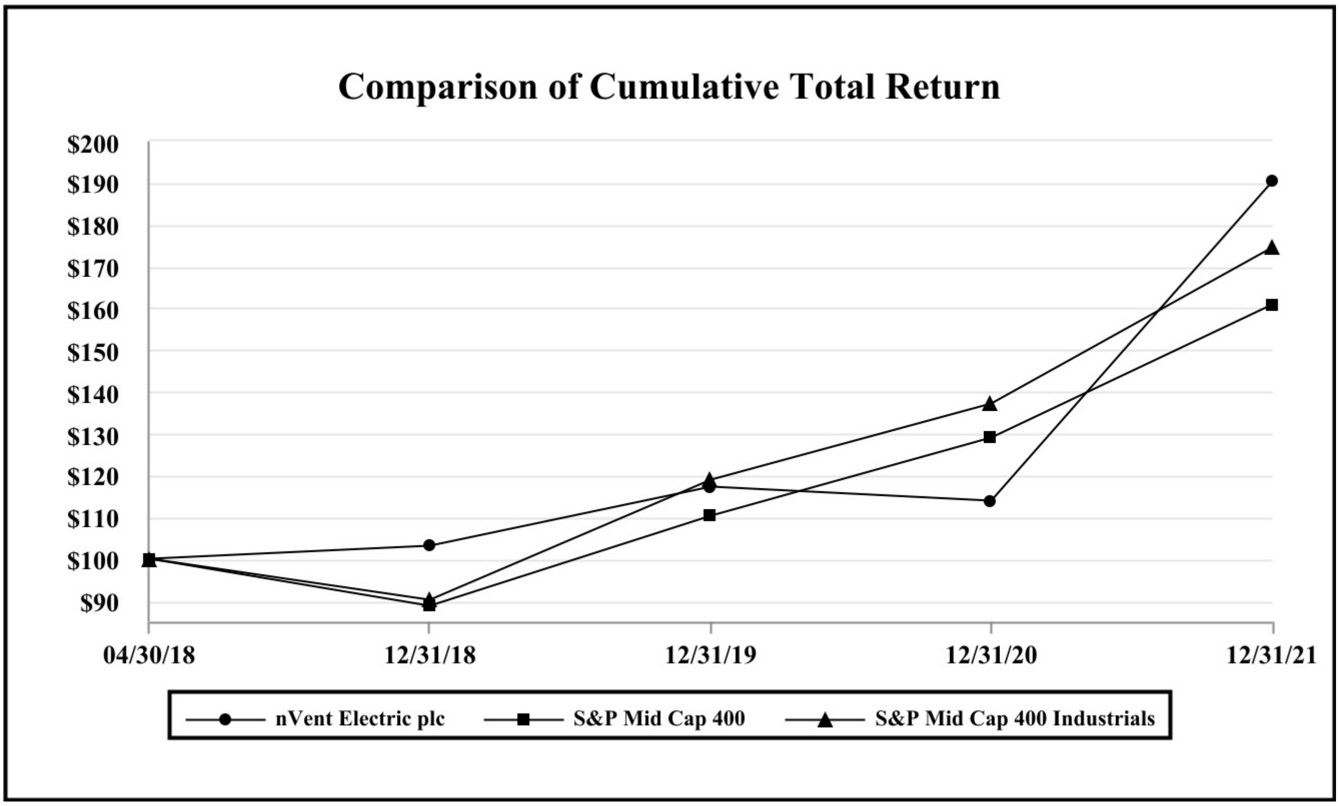
Our ordinary shares are listed for trading on the New York Stock Exchange and trade under the symbol "NVT." As of December 31, 2021, there were 13,678 shareholders of record.

The timing, declaration and payment of future dividends to holders of our ordinary shares will depend upon many factors, including our financial condition and results of operations, the capital requirements of our businesses, industry practice and any other relevant factors.

Share Performance Graph

The following information under the caption "Share Performance Graph" in this ITEM 5 of this Annual Report on Form 10-K is not deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or to the liabilities of Section 18 of the Exchange Act and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent we specifically incorporate it by reference into such a filing.

The following graph sets forth the cumulative total shareholder return on our ordinary shares from the date of the separation of nVent from Pentair, assuming the investment of $100 on April 30, 2018 and the reinvestment of all dividends since that date to December 31, 2021. The graph also contains for comparison purposes the S&P Mid Cap 400 Index and the S&P Mid Cap 400 Industrials Index, assuming the same investment level and reinvestment of dividends. By virtue of our market capitalization, we are a component of the S&P Mid Cap 400 Index. On the basis of our size and diversity of businesses, we believe the S&P Mid Cap 400 Industrials Index is an appropriate published industry index for comparison purposes.



	Base Period 2018	INDEXED RETURNS Years ended December 31,			
Company / Index	**April 30**	**2018**	**2019**	**2020**	**2021**
nVent Electric plc	**100**	102.99	117.30	113.84	190.38
S&P Mid Cap 400 Index	**100**	88.82	110.18	128.87	160.77
S&P Mid Cap 400 Industrials Index	**100**	90.13	118.98	137.03	174.59

Purchases of Equity Securities

The following table provides information with respect to purchases we made of our ordinary shares during the fourth quarter of 2021:

	(a) Total number of shares purchased	(b) Average price paid per share	(c) Total number of shares purchased as part of publicly announced plans or programs	(d) Dollar value of shares that may yet be purchased under the plans or programs
October 1 – October 30, 2021	199	$ 35.23	—	$ 300,000,000
October 31 – November 27, 2021	964,927	36.92	738,668	272,429,945
November 28 – December 31, 2021	1,660,516	36.83	1,867,166	203,883,660
Total	2,625,642		2,605,834	

(a) The purchases in this column includes shares repurchased as part of our publicly announced plans and shares deemed surrendered to us by participants in the nVent Electric plc 2018 Omnibus Incentive Plan (the "2018 Plan") and earlier Pentair stock incentive plans that are now outstanding under the 2018 Plan (collectively the "Plans") to satisfy the exercise price or withholding of tax obligations related to the exercise of stock options, vesting of restricted shares and vesting of performance shares.

(b) The average price paid in this column includes shares repurchased as part of our publicly announced plans and shares deemed surrendered to us by participants in the Plans to satisfy the exercise price of stock options and withholding tax obligations due upon stock option exercises, vesting of restricted shares and vesting of performance shares.

(c) The number of shares in this column represents the number of shares repurchased as part of our publicly announced plans to repurchase our ordinary shares up to a maximum dollar limit authorized by the Board of Directors, discussed below.

(d) On May 14, 2021, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $300.0 million (the "2021 Authorization"). The 2021 Authorization began on July 23, 2021 and expires on July 22, 2024. As of December 31, 2021, we had $203.9 million available for repurchases under the 2021 Authorization.

ITEM 6. RESERVED

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

This Management's Discussion and Analysis of Financial Condition and Results of Operations refers to and should be read in conjunction with the audited consolidated financial statements and the corresponding notes included in ITEM 8.

Forward-looking statements
This report contains statements that we believe to be "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact are forward-looking statements. Without limitation, any statements preceded or followed by or that include the words "targets," "plans," "believes," "expects," "intends," "will," "likely," "may," "anticipates," "estimates," "projects," "forecasts," "should," "would," "positioned," "strategy," "future," "are confident," or words, phrases or terms of similar substance or the negative thereof, are forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, assumptions and other factors, some of which are beyond our control, which could cause actual results to differ materially from those expressed or implied by such forward-looking statements. These factors include adverse effects on our business operations or financial results, including due to the impact of the novel coronavirus 2019 ("COVID-19") pandemic and potential impairment of goodwill and trade names; overall global economic and business conditions impacting our business; the ability to achieve the benefits of our restructuring plans; the ability to successfully identify, finance, complete and integrate acquisitions; competition and pricing pressures in the markets we serve, including the impacts of tariffs; volatility in currency exchange rates and commodity prices; inability to generate savings from excellence in operations initiatives consisting of lean enterprise, supply management and cash flow practices; inability to mitigate material and other cost inflation; risks related to the availability of, and cost inflation in, supply chain inputs, including labor, raw materials, commodities, packaging and transportation; increased risks associated with operating foreign businesses; the ability to deliver backlog and win future project work; failure of markets to accept new product introductions and enhancements; the impact of changes in laws and regulations, including those that limit U.S. tax benefits; the outcome of litigation and governmental proceedings; and the ability to achieve our long-term strategic operating goals. Additional information concerning these and other factors is contained in our filings with the U.S. Securities and Exchange Commission (the "SEC"), including this Annual Report on Form 10-K. All forward-looking statements speak only as of the date of this report. nVent Electric plc assumes no obligation, and disclaims any obligation, to update the information contained in this report.

The following is the discussion and analysis of changes in the financial condition and results of operations for fiscal year 2021 compared to fiscal year 2020. The discussion and analysis of fiscal year 2019 and changes in the financial condition and results of operations for fiscal year 2020 compared to fiscal year 2019 that are not included in this Form 10-K may be found in Part II, ITEM 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the SEC on February 23, 2021.

Overview
The terms "us," "we," "our," "the Company" or "nVent" refer to nVent Electric plc. nVent is a leading global provider of electrical connection and protection solutions. We believe our inventive electrical solutions enable safer systems and ensure a more secure world. We design, manufacture, market, install and service high performance products and solutions that connect and protect some of the world's most sensitive equipment, buildings and critical processes. We offer a comprehensive range of enclosures, electrical connections and fastening and thermal management solutions across industry-leading brands that are recognized globally for quality, reliability and innovation.

We classify our operations into business segments based primarily on types of products offered and markets served. We operate across three segments: Enclosures, Electrical & Fastening Solutions and Thermal Management, which represented approximately 51%, 26% and 23% of total revenues during 2021, respectively.

- ***Enclosures***—The Enclosures segment provides innovative solutions to connect, protect, power and cool critical controls systems, electronics, data and electrical equipment. From metallic and non-metallic enclosures to cabinets, subracks and backplanes, it offers the physical infrastructure to host, connect and protect server and network equipment, as well as indoor and outdoor protection for test and measurement and aerospace and defense applications in industrial, infrastructure, commercial and energy verticals.

- ***Electrical & Fastening Solutions***—The Electrical & Fastening Solutions segment provides solutions that connect and protect electrical and mechanical systems and civil structures. Its engineered electrical and fastening products are innovative, cost efficient and time saving connections that are used across a wide range of verticals, including commercial, infrastructure, industrial and energy.

- ***Thermal Management***—The Thermal Management segment provides electric thermal solutions that connect and protect critical buildings, infrastructure, industrial processes and people. Its thermal management systems include heat tracing, floor heating, fire-rated and specialty wiring, sensing and snow melting and de-icing solutions for use in industrial, commercial & residential, energy and infrastructure verticals. Its highly reliable and easy to install solutions lower total cost of ownership to building owners, facility managers, operators and end users.

On February 10, 2020, we acquired substantially all of the assets of WBT LLC ("WBT") for $29.9 million in cash. The U.S. based WBT business manufactures high-quality cable tray systems and operates within our Electrical & Fastening Solutions segment.

On April 1, 2021, we acquired substantially all of the assets of Vynckier Enclosure Systems, Inc. ("Vynckier") for approximately $27.0 million in cash. The U.S. based Vynckier business manufactures high-quality non-metallic enclosures that we market as part of the nVent HOFFMAN product line within our Enclosures segment.

On June 30, 2021, we acquired CIS Global LLC ("CIS Global") for approximately $202.4 million in cash. The CIS Global business is a leading provider of intelligent rack power distribution and server slides products, and operates within our Enclosures segment.

COVID-19

In March 2020, the World Health Organization declared COVID-19 a pandemic. The COVID-19 pandemic has resulted, and is likely to continue to result, in significant economic disruption and has adversely affected, and may continue to adversely affect, our business. Governments around the world have implemented measures to help control the spread of the virus, including business curtailments and shutdowns, isolating residents to their places of residence and restricting travel. The effects of the COVID-19 pandemic have had and may continue to have an unfavorable impact on our business.

Beginning in March 2020, we experienced significant reductions in customer demand in several end-markets across our business segments. However, economic activity in many of the end-markets in which we operate began to stabilize and recover in the second half of 2020, and continued to increase in 2021. Our organic sales increased 18% in 2021 as compared to 2020.

In response to the adverse effects of the pandemic, we executed a number of temporary cash and cost-savings measures, which were largely implemented in 2020. As our business has seen significant improvement in our financial results and improved outlook for many end-markets, we eliminated in 2021 many of the temporary cash and cost savings measures put in place.

While our facilities remained operational during 2021, we continue to experience various degrees of higher manufacturing cost pressures and inflation as a result of supply chain challenges and high demand. Although we regularly monitor the financial health and operations of companies in our supply chain, and use alternative suppliers when necessary and available, supply chain constraints could cause a disruption in our ability to obtain raw materials or components required to manufacture our products and adversely affect our operations. As the COVID-19 conditions have improved and economic activity has increased, we have experienced supply chain challenges, including increased lead times, as well as inflation of raw materials, logistics and labor costs due to availability constraints and high demand. We expect the inflationary trends and supply chain pressures to continue in 2022.

We continue to actively monitor the impacts of the pandemic and global efforts to respond to it, and may take further actions that alter our business operations as may be required by governments in the jurisdictions where we operate, or that we determine are in the best interests of our employees, customers, suppliers and shareholders.

Key trends and uncertainties regarding our existing business

The following trends and uncertainties affected our financial performance in 2021 and 2020, and are reasonably likely to impact our results in the future:

- There are many uncertainties regarding the COVID-19 pandemic, including the anticipated duration and severity of the pandemic and the extent of worldwide social, political and economic disruption it may cause. The magnitude of the impact of the pandemic on our financial condition, liquidity and results of operations cannot be determined at this time, and ultimately will be affected by a number of evolving factors including the length of time that the pandemic continues, the ability of vaccines to protect against variant strains of COVID-19, the pandemic's effect on the demand for our products and services and the supply chain, as well as the impact of governmental regulations imposed in response to the pandemic including potential business curtailments and shutdowns impacting our factories.
- We have identified specific product, vertical and geographic market opportunities that we find attractive and continue to pursue, both within and outside the U.S. We are positioning our businesses to more effectively address these opportunities through research and development and additional sales and marketing resources. Unless we successfully penetrate these markets, our organic sales growth will likely be limited or may decline.

- During 2021, we experienced supply chain challenges, including increased lead times, and inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand. While we have taken pricing actions and we plan for productivity improvements that could help offset these cost increases, we expect supply chain pressures and inflationary cost increases to continue into 2022, and could negatively impact our results of operations.

- During 2021 and 2020, we continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business.

In 2022, our operating objectives include the following:

- Executing our ESG strategy focused on People, Products and Planet;

- Enhancing and supporting employee engagement, development and retention;

- Achieving differentiated revenue growth through new products and innovation and expansion in higher growth verticals across all regions globally;

- Optimizing our technological capabilities to increasingly generate innovative new and connected products and advance digital transformation;

- Driving operational excellence through lean and agile, with specific focus on our digital transformation and supply chain resiliency;

- Optimizing working capital through inventory reduction initiatives across business segments and focused actions to optimize customer and vendor payment terms; and

- Deploying capital strategically to drive growth and value creation.

CONSOLIDATED RESULTS OF OPERATIONS

The consolidated results of operations were as follows:

In millions	Years ended December 31 2021	Years ended December 31 2020	% / point change 2021 vs 2020
Net sales	$ 2,462.0	$ 1,998.6	23.2 %
Cost of goods sold	1,520.1	1,249.2	21.7 %
Gross profit	941.9	749.4	25.7 %
% of net sales	*38.3 %*	*37.5 %*	*0.8 pts*
Selling, general and administrative	537.9	447.0	20.3 %
% of net sales	*21.8 %*	*22.4 %*	*(0.6 pts)*
Research and development	48.6	43.5	11.7 %
% of net sales	*2.0 %*	*2.2 %*	*(0.2 pts)*
Impairment of goodwill and trade names	—	220.5	N.M.
Operating income	355.4	38.4	825.5 %
% of net sales	*14.4 %*	*1.9 %*	*12.5 pts*
Net interest expense	32.3	36.4	N.M.
Loss on early extinguishment of debt	15.2	—	N.M.
Other expense (income)	(12.8)	11.5	N.M.
Income (loss) before income taxes	320.7	(9.5)	N.M.
Provision for income taxes	47.8	37.7	26.8 %
Effective tax rate	*14.9 %*	*(396.8 %)*	N.M.
Net income (loss)	272.9	(47.2)	678.2 %

N.M. Not Meaningful

Net sales

The components of the consolidated net sales change were as follows:

	2021 vs 2020
Volume	11.3 %
Price	7.1
Organic growth	18.4
Acquisition	2.8
Currency	2.0
Total	23.2 %

The 23.2 percent increase in net sales in 2021 from 2020 was primarily the result of:

- organic sales growth contribution of approximately 9.0%, 4.5% and 3.0% from our industrial, commercial & residential and infrastructure businesses, respectively, in 2021 from 2020, which includes increases in selling prices;
- sales of $54.5 million as a result of the CIS Global and Vynckier acquisitions; and
- favorable foreign currency effects.

Gross profit
The 0.8 percentage point increase in gross profit as a percentage of sales in 2021 from 2020 was primarily the result of:

- increased sales volume resulting in increased leverage on fixed expenses in cost of goods sold;
- increases in selling prices to mitigate inflationary cost increases; and
- savings generated from our lean and supply management practices.

This increase was partially offset by:

- supply chain challenges, including increased lead times, and inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand compared to 2020.

Selling, general and administrative ("SG&A")
The 0.6 percentage point decrease in SG&A expense as a percentage of sales in 2021 from 2020 was driven by:

- increased sales volume resulting in increased leverage on fixed operating expenses;
- restructuring and other costs of $8.8 million in 2021, compared to $22.0 million in 2020; and
- savings generated from restructuring and other lean initiatives.

This decrease was partially offset by:

- inflationary increases impacting our labor costs compared to 2020;
- temporary actions taken in 2020 to lower costs in response to the adverse effects of the COVID-19 pandemic, including reducing labor costs and limiting discretionary spending for purchased services and travel; and
- higher employee incentive compensation expense compared to 2020.

Impairment of goodwill and trade names
In 2020, as a result of the adverse market and economic conditions attributed to the COVID-19 pandemic, combined with significant volatility in oil and gas prices leading to a potential sustained downturn in the energy industry, we recognized pre-tax, non-cash impairment expense of $220.5 million, which primarily relates to a $212.3 million impairment of goodwill in the Thermal Management reporting unit. In 2020, we also recognized pre-tax, non-cash impairment expense of $8.2 million related to trade names.

Loss on early extinguishment of debt
In 2021, we issued $300.0 million of 2.750% fixed rate senior notes due 2031 and utilized the proceeds to redeem $300.0 million of 3.950% fixed rate senior notes due 2023. The $15.2 million premium paid on the early extinguishment was recorded as *Loss on the early extinguishment of debt.*

Provision for income taxes
The difference in the effective tax rate in 2021 from 2020 was primarily the result of:

- the unfavorable tax rate impact of the 2020 non-cash impairment expense of $220.5 million related primarily to goodwill;
- a $19.4 million non-cash charge related to the establishment of a valuation allowance on certain foreign deferred tax assets recorded in 2020; and
- a $5.5 million one-time benefit recorded in 2021 to reflect an anticipated worthless stock deduction on an investment in a foreign subsidiary.

SEGMENT RESULTS OF OPERATIONS

The summary that follows provides a discussion of the results of operations of our three reportable segments (Enclosures, Electrical & Fastening Solutions and Thermal Management). Each of these segments comprises various product offerings that serve multiple end users.

We evaluate performance based on sales and segment income and use a variety of ratios to measure performance of our reporting segments. Segment income represents operating income exclusive of intangible amortization, separation costs, costs of restructuring activities, impairments and other unusual non-operating items.

Enclosures
The net sales and segment income for Enclosures were as follows:

	Years ended December 31		**% / point change**
In millions	**2021**	**2020**	**2021 vs 2020**
Net sales	$ 1,244.8	$ 952.9	30.6 %
Segment income	202.1	148.5	36.1 %
% of net sales	*16.2%*	*15.6%*	*0.6 pts*

Net sales
The components of the change in Enclosures net sales were as follows:

	2021 vs 2020
Volume	16.2 %
Price	7.0
Organic growth	23.2
Acquisition	5.7
Currency	1.7
Total	30.6 %

The 30.6 percent increase in Enclosures net sales in 2021 from 2020 was primarily the result of:

- organic sales growth contribution of approximately 14.5%, 3.5% and 3.0% from our industrial, infrastructure and commercial & residential businesses, respectively, in 2021 from 2020, which includes increases in selling prices;
- sales of $54.5 as a result of the CIS Global and Vynckier acquisitions; and
- favorable foreign currency effects.

Segment income
The components of the change in Enclosures segment income as a percentage of net sales from the prior period were as follows:

	2021 vs 2020
Growth/acquisition	3.3 pts
Price	5.5
Currency	(0.3)
Net productivity	(7.9)
Total	0.6 pts

The 0.6 percentage point increase in segment income for Enclosures as a percentage of net sales in 2021 from 2020 was primarily the result of:

- increases in selling prices to mitigate inflationary cost increases; and
- higher sales volume resulting in increased leverage on fixed expenses.

This increase was partially offset by:

- supply chain challenges, including increased lead times, and inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand compared to 2020;
- temporary actions taken in 2020 to lower costs in response to the adverse effects of the COVID-19 pandemic, including reducing labor costs and limiting discretionary spending for purchased services and travel; and
- higher sales volume resulting in increased employee incentive compensation expense compared to 2020.

Electrical & Fastening Solutions
The net sales and segment income for Electrical & Fastening Solutions were as follows:

	Years ended December 31		% / point change
In millions	**2021**	**2020**	**2021 vs 2020**
Net sales	$ 657.5	$ 569.1	15.5 %
Segment income	181.5	150.2	20.8 %
% of net sales	*27.6%*	*26.4%*	*1.2 pts*

Net sales
The components of the change in Electrical & Fastening Solutions net sales were as follows:

	2021 vs 2020
Volume	3.1 %
Price	10.6
Organic growth	13.7
Acquisition	0.3
Currency	1.5
Total	15.5 %

The 15.5 percent increase in Electrical & Fastening Solutions net sales in 2021 from 2020 was primarily the result of:.

- organic sales growth contribution of approximately 6.5% and 5.0% from our commercial & residential and infrastructure businesses, respectively, in 2021 from 2020, which includes increases in selling prices; and
- favorable foreign currency effects.

Segment income
The components of the change in Electrical & Fastening Solutions segment income as a percentage of net sales from the prior period were as follows:

	2021 vs 2020
Growth/acquisition	0.6 pts
Price	7.1
Currency	0.1
Net productivity	(6.6)
Total	1.2 pts

The 1.2 percentage point increase in segment income for Electrical & Fastening Solutions as a percentage of net sales in 2021 from 2020 was primarily the result of:

- increases in selling prices to mitigate inflationary cost increases;
- higher sales volume resulting in increased leverage on fixed expenses; and
- savings generated from restructuring and lean initiatives.

This increase was partially offset by:

- supply chain challenges, including increased lead times, and inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand compared to 2020;
- temporary actions taken in 2020 to lower costs in response to the adverse effects of the COVID-19 pandemic, including reducing labor costs and limiting discretionary spending for purchased services and travel; and
- higher sales volume resulting in increased employee incentive compensation expense compared to 2020.

Thermal Management
The net sales and segment income for Thermal Management were as follows:

	Years ended December 31		% / point change
In millions	**2021**	**2020**	**2021 vs 2020**
Net sales	$ 559.7	$ 476.6	17.4 %
Segment income	121.2	93.9	29.1 %
% of net sales	*21.7%*	*19.7%*	*2.0 pts*

Net sales
The components of the change in Thermal Management net sales were as follows:

	2021 vs 2020
Volume	11.3 %
Price	3.2
Organic growth	14.5
Currency	2.9
Total	17.4 %

The 17.4 percent increase in Thermal Management net sales in 2021 from 2020 was primarily the result of:

- organic sales growth contribution of approximately 7.5% and 6.0% from our industrial and commercial & residential businesses, respectively, in 2021 from 2020, which includes increases in selling prices; and
- favorable foreign currency effects.

Segment income
The components of the change in Thermal Management segment income as a percentage of net sales from the prior period were as follows:

	2021 vs 2020
Growth/acquisition	3.5 pts
Price	2.5
Currency	0.1
Net productivity	(4.1)
Total	2.0 pts

The 2.0 percentage point increase in segment income for Thermal Management as a percentage of net sales in 2021 from 2020 was primarily the result of:

- higher sales volume resulting in increased leverage on fixed expenses;
- increases in selling prices to mitigate inflationary cost increases; and
- savings generated from restructuring and lean initiatives.

This increase was partially offset by:

- supply chain challenges, including increased lead times, and inflationary increases of raw materials, logistics and labor costs due to availability constraints and high demand compared to 2020;
- temporary actions taken in 2020 to lower costs in response to the adverse effects of the COVID-19 pandemic, including reducing labor costs and limiting discretionary spending for purchased services and travel; and
- higher sales volume resulting in increased employee incentive compensation expense compared to 2020.

LIQUIDITY AND CAPITAL RESOURCES

The primary source of liquidity for our business is cash flows provided by operations. We expect to continue to have cash requirements to support working capital needs and capital expenditures, to pay interest and service debt, to pay dividends to shareholders quarterly and otherwise as described below under "Material cash requirements." We believe we have the ability and sufficient capacity to meet these cash requirements in the short term and long term by using available cash, internally generated funds and borrowing under committed credit facilities. We are focused on increasing our cash flow, while continuing to fund our research and development, sales and marketing and capital investment initiatives. Our intent is to maintain investment grade metrics and a solid liquidity position. As of December 31, 2021, we had $49.5 million of cash on hand, of which $20.8 million is held in certain countries in which the ability to repatriate is limited due to local regulations or significant potential tax consequences.

We experience seasonal cash flows primarily due to increased demand for Electrical & Fastening Solutions products during the spring and summer months in the Northern Hemisphere and increased demand for Thermal Management products and services during the fall and winter months in the Northern Hemisphere.

Operating activities

Net cash provided by operating activities was $373.3 million in 2021, compared to $344.0 million in 2020. Net cash provided by operating activities in 2021 primarily reflects net income of $381.3 million, net of non-cash depreciation and amortization, and the negative impact of $9.2 million as a result of changes in net working capital. Net cash provided by operating activities in 2020 primarily reflects net income of $275.9 million, net of non-cash depreciation, amortization, and impairment expenses, and the positive impact of $46.8 million as a result of changes in net working capital.

Investing activities

Net cash used for investing activities was $274.0 million in 2021, which related primarily to capital expenditures of $39.5 million and cash paid for the CIS Global and Vynckier acquisitions of $228.0 million, net of cash acquired. Net cash used for investing activities was $65.0 million in 2020, which primarily related to capital expenditures of $40.0 million and cash paid for the acquisition of WBT of $27.0 million. Capital expenditures are primarily used for expansion of manufacturing facilities, developing new products and general maintenance.

Financing activities

Net cash used for financing activities was $166.8 million in 2021, which primarily related to share repurchases of $111.5 million, dividends paid of $117.7 million and net receipts of revolving long-term debt of $72.1 million. As noted below, in 2021, we issued $300.0 million of 2.750% fixed rate senior notes due 2031, and utilized the proceeds to redeem $300.0 million of 3.950% fixed rate senior notes due 2023. We also settled an outstanding interest rate swap related for $9.6 million related to the debt that was redeemed and incurred $15.2 million of costs related to the early extinguishment of the debt.

Net cash used for financing activities was $272.5 million in 2020, which primarily related to share repurchases of $43.2 million, dividends paid of $119.0 million and net payments of revolving long-term debt of $100.0 million.

Senior notes

In March 2018, nVent Finance S.à r.l. (“nVent Finance” or "Subsidiary Issuer"), a 100-percent owned subsidiary of nVent, issued $300.0 million aggregate principal amount of 3.950% senior notes due 2023 (the "2023 Notes") and $500.0 million aggregate principal amount of 4.550% senior notes due 2028 (the "2028 Notes").

In November 2021, nVent Finance issued $300.0 million aggregate principal amount of 2.750% fixed rate senior notes due 2031 (the "2031 Notes" and, collectively with the 2028 Notes, the "Notes"). In December 2021, we redeemed the $300 million aggregate principal amount of our 3.950% fixed rate senior notes due 2023. We incurred costs of $15.2 million related to the early extinguishment of the 2023 Notes.

Interest on the 2028 Notes is payable semi-annually in arrears on April 15 and October 15 of each year, and interest on the 2031 Notes is payable semi-annually in arrears on May 15 and November 15 of each year.

The Notes are fully and unconditionally guaranteed as to payment by nVent (the "Parent Company Guarantor"). There are no subsidiaries that guarantee the Notes. The Parent Company Guarantor is a holding company that has no independent assets or operations unrelated to its investments in consolidated subsidiaries. The Subsidiary Issuer is a holding company that has no independent assets or operations unrelated to its investments in consolidated subsidiaries and the issuance of the Notes and other external debt. The Parent Company Guarantor’s principal source of cash flow, including cash flow to make payments on the Notes pursuant to the guarantees, is dividends from its subsidiaries. The Subsidiary Issuer’s principal source of cash flow is interest income from its subsidiaries. None of the subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer is under any direct obligation to pay or otherwise fund amounts due on the Notes or the guarantees, whether in the form of dividends, distributions, loans or other payments. In addition, there may be statutory and regulatory limitations on the payment of dividends from certain subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer. If such subsidiaries are unable to transfer funds to the Parent Company Guarantor or the Subsidiary Issuer and sufficient cash or liquidity is not otherwise available, the Parent Company Guarantor or the Subsidiary Issuer may not be able to make principal and interest payments on their outstanding debt, including the Notes or the guarantees.

The Notes constitute general unsecured senior obligations of the Subsidiary Issuer and rank equally in right of payment with all existing and future unsubordinated and unsecured indebtedness and liabilities of the Subsidiary Issuer. The guarantees of the Notes by the Parent Company Guarantor constitute general unsecured obligations of the Parent Company Guarantor and rank equally in right of payment with all existing and future unsubordinated and unsecured indebtedness and liabilities of the Subsidiary Issuer. Subject to certain qualifications and exceptions, the indenture pursuant to which the Notes were issued contains covenants that, among other things, restrict nVent’s, nVent Finance’s and certain subsidiaries’ ability to merge or consolidate with another person, create liens or engage in sale and lease-back transactions.

There are no significant restrictions on the ability of nVent to obtain funds from its subsidiaries by dividend or loan. None of the assets of nVent or its subsidiaries represents restricted net assets pursuant to the guidelines established by the SEC.

Senior credit facilities

In March 2018, the Company and its subsidiaries nVent Finance and Hoffman Schroff Holdings, Inc. entered into a credit agreement with a syndicate of banks providing for a five-year $200.0 million senior unsecured term loan facility and a five-year $600.0 million senior unsecured revolving credit facility.

In September 2021, the Company and its subsidiaries nVent Finance and Hoffman Schroff Holdings, Inc. entered into an amended and restated credit agreement (the "Credit Agreement") with a syndicate of banks providing for a five-year $300.0 million senior unsecured term loan facility (the "Term Loan Facility") and a five-year $600.0 million senior unsecured revolving credit facility (the "Revolving Credit Facility" and, together with the Term Loan Facility, the "Senior Credit Facilities"), which amended and restated the March 2018 credit agreement. Borrowings under the Term Loan Facility are permitted on a delayed draw basis during the first year of the five-year term of the Term Loan Facility, and borrowings under the Revolving Credit Facility are permitted from time to time during the full five-year term of the Revolving Credit Facility. nVent Finance has the option to request to increase the Revolving Credit Facility in an aggregate amount of up to $300.0 million, subject to customary conditions, including the commitment of the participating lenders.

Borrowings under the Senior Credit Facilities bear interest at a rate equal to an adjusted base rate, London Interbank Offered Rate (“LIBOR”), Euro Interbank Offer Rate (“EURIBOR”) or Sterling Overnight Index Average (“SONIA”), plus, in each case, an applicable margin. The applicable margin will be based on, at nVent Finance’s election, the Company's leverage level or public credit rating.

As of December 31, 2021, the borrowing capacity under the Term Loan Facility on a delayed draw basis was $200.0 million, and the borrowing capacity under the Revolving Credit Facility was $493.3 million.

Our debt agreements contain certain financial covenants, the most restrictive of which are in the Senior Credit Facilities, including that we may not permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash in excess of $5.0 million but not to exceed $250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense ("EBITDA") on the last day of any period of four consecutive fiscal quarters (each, a "testing period") to exceed 3.75 to 1.00 (or, at nVent Finance’s election and subject to certain conditions, 4.25 to 1.00 for four testing periods in connection with certain material acquisitions) and (ii) the ratio of our EBITDA to our consolidated interest expense for the same period to be less than 3.00 to 1.00. In addition, subject to certain qualifications and exceptions, the Senior Credit Facilities also contain covenants that, among other things, restrict our ability to create liens, merge or consolidate with another person, make acquisitions and incur subsidiary debt. As of December 31, 2021, we were in compliance with all financial covenants in our debt agreements, and there is no material uncertainty about our ongoing ability to meet those covenants.

Share repurchases
On July 23, 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $500.0 million (the "2018 Authorization"). On February 19, 2019, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $380.0 million (the "2019 Authorization"). The 2018 and the 2019 Authorizations expired on July 23, 2021.

On May 14, 2021, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $300.0 million (the "2021 Authorization"). The 2021 Authorization began on July 23, 2021 upon expiration of the 2018 Authorization and the 2019 Authorization, and expires on July 22, 2024.

During the year ended December 31, 2021, we repurchased 3.5 million of our ordinary shares for $116.1 million under the 2018 Authorization and the 2021 Authorization. As of December 31, 2021, we had $203.9 million available for share repurchases under the 2021 Authorization.

Dividends
Dividends paid per ordinary share were $0.70 for both the years ended December 31, 2021 and 2020.

On December 13, 2021, the Board of Directors declared a quarterly cash dividend of $0.175 that was paid on February 4, 2022 to shareholders of record at the close of business on January 21, 2022. The balance of dividends payable included in *Other current liabilities* on our Consolidated Balance Sheets was $30.5 million and $29.4 million at December 31, 2021 and 2020, respectively.

On February 21, 2022, the Board of Directors declared a quarterly cash dividend of $0.175 per ordinary share payable on May 6, 2022 to shareholders of record at the close of business on April 22, 2022.

Under Irish law, the payment of future cash dividends and repurchases of shares may be paid only out of nVent Electric plc's "distributable reserves" on its statutory balance sheet. nVent Electric plc is not permitted to pay dividends out of share capital, which includes share premiums. Distributable reserves may be created through the earnings of the Irish parent company and through a reduction in share capital approved by the Irish High Court. Distributable reserves of nVent Electric plc are not linked to a generally accepted accounting principles in the United States of America ("GAAP") reported amount (e.g., retained earnings). Our distributable reserve balance was $2.9 billion and $3.1 billion as of December 31, 2021 and 2020, respectively.

Authorized shares
Our authorized share capital consists of 400.0 million ordinary shares with a par value of $0.01 per share.

Material cash requirements
In general, we require cash to fund working capital investments, acquisitions, capital expenditures, debt and interest payments, taxes, dividends and share repurchases.

Our material contractual cash requirements as of December 31, 2021 include principal and interest on long-term debt as well as payments for operating lease liabilities. Servicing these obligations includes the following estimated cash outflows from December 31, 2021:

In millions	**Within 1 year**	**Greater than 1 year**	**Total**
Debt obligations	$ 5.0	$ 1,000.5	$ 1,005.5
Interest obligations on fixed-rate debt	31.0	199.4	230.4
Operating lease obligations, net of sublease rentals	20.8	76.3	97.1
Total	$ 56.8	$ 1,276.2	$ 1,333.0

We also incur purchase obligations in the ordinary course of business that are enforceable and legally binding. We have contractual purchase obligations of $84.0 million for 2022, which represent commitments for raw materials to be utilized in the normal course of business for which all significant terms have been confirmed. Contractual purchase obligations beyond 2022 are not material.

The total gross liability for uncertain tax positions at December 31, 2021 was estimated to be $15.6 million. We record penalties and interest related to unrecognized tax benefits in *Provision for income taxes* and *Net interest expense*, respectively, which is consistent with our past practices. As of December 31, 2021, we had recorded $2.1 million for the possible payment of penalties and $2.9 million related to the possible payment of interest.

Other financial measures

In addition to measuring our cash flow generation or usage based upon operating, investing and financing classifications included in the Consolidated Statements of Cash Flows, we also measure our free cash flow. Free cash flow is a non-GAAP financial measure that we use to assess our cash flow performance. We believe free cash flow is an important measure of liquidity because it provides us and our investors a measurement of cash generated from operations that is available to pay dividends, make acquisitions, repay debt and repurchase shares. In addition, free cash flow is used as a criterion to measure and pay annual incentive compensation. Our measure of free cash flow may not be comparable to similarly titled measures reported by other companies.

The following table is a reconciliation of free cash flow:

	Years ended December 31	
In millions	**2021**	**2020**
Net cash provided by (used for) operating activities	$ 373.3	$ 344.0
Capital expenditures	(39.5)	(40.0)
Proceeds from sale of property and equipment	0.6	2.0
Free cash flow	$ 334.4	$ 306.0

COMMITMENTS AND CONTINGENCIES

We have been, and in the future may be, made parties to a number of actions filed or have been, and in the future may be, given notice of potential claims relating to the conduct of our business, including those pertaining to commercial or contractual disputes, product liability, environmental, safety and health, patent infringement and employment matters.

While we believe that a material impact on our consolidated financial position, results of operations or cash flows from any such future claims or potential claims is unlikely, given the inherent uncertainty of litigation, a remote possibility exists that a future adverse ruling or unfavorable development could result in future charges that could have a material impact. We do and will continue to periodically re-examine our estimates of probable liabilities and any associated expenses and receivables and make appropriate adjustments to such estimates based on experience and developments in litigation. As a result, the current estimates of the potential impact on our consolidated financial position, results of operations and cash flows for the proceedings and claims described in ITEM 8, Note 16 of the Notes to the Consolidated Financial Statements could change in the future.

Stand-by Letters of Credit, Bank Guarantees and Bonds

In the ordinary course of business, we are required to commit to bonds, letters of credit and bank guarantees that require payments to our customers for any non-performance. The outstanding face value of these instruments fluctuates with the value of our projects in process and in our backlog. In addition, we issue financial stand-by letters of credit primarily to secure our performance to third parties under self-insurance programs.

As of December 31, 2021 and 2020, the outstanding value of bonds, letters of credit and bank guarantees totaled $38.2 million and $43.8 million, respectively.

NEW ACCOUNTING STANDARDS

See ITEM 8, Note 1 of the Notes to Consolidated Financial Statements, included in this Form 10-K, for information pertaining to recently adopted accounting standards or accounting standards to be adopted in the future.

CRITICAL ACCOUNTING ESTIMATES

We have adopted various accounting policies to prepare the consolidated financial statements in accordance with GAAP. Our significant accounting policies are more fully described in ITEM 8, Note 1 of the Notes to Consolidated Financial Statements. Certain of our accounting policies require the application of significant judgment by management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. These judgments are based on our historical experience, terms of existing contracts, our observance of trends in the industry and information available from other outside sources, as appropriate. We consider an accounting estimate to be critical if:

- it requires us to make assumptions about matters that were uncertain at the time we were making the estimate; and
- changes in the estimate or different estimates that we could have selected would have had a material impact on our financial condition or results of operations.

Impairment of goodwill and indefinite-lived intangibles

Goodwill

Goodwill represents the excess of the cost of acquired businesses over the net of the fair value of identifiable tangible net assets and identifiable intangible assets purchased and liabilities assumed.

Goodwill is tested annually for impairment as of the first day of the fourth quarter, and is tested for impairment more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment test is performed by comparing the fair value of each reporting unit with its carrying amount, and recognizing an impairment expense for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

The fair value of each reporting unit is determined using a discounted cash flow analysis and market approach. Projecting discounted future cash flows requires us to make significant estimates regarding future revenues and expenses, projected capital expenditures, changes in working capital and the appropriate discount rate. Use of the market approach consists of comparisons to comparable publicly-traded companies that are similar in size and industry. Actual results may differ from those used in our valuations.

Determining the fair value of the reporting units required the use of significant judgment, including assumptions about future revenues and expenses, capital expenditures and changes in working capital and discount rates, which are based on our annual operating plan and long-term business plan. These plans take into consideration numerous factors including historical experience, anticipated future economic conditions, including the impacts from the COVID-19 pandemic and growth expectations for the industries and end markets in which the reporting unit participates. The level of judgment and estimation is inherently high. We have evaluated numerous factors and made significant assumptions, which include the severity and duration of the business disruption, the potential impact on customer demand, the timing and degree of economic recovery and ultimately, the combined effect of these assumptions on our future operating results and cash flows. These assumptions are determined over a six year long-term planning period. The six year growth rates for revenues and operating profits vary for each reporting unit being evaluated. Revenues and operating profit beyond 2027 are projected to grow at a perpetual growth rate of 3.0%.

Discount rate assumptions for each reporting unit take into consideration our assessment of risks inherent in the future cash flows of the respective reporting unit and our weighted-average cost of capital. We utilized a discount rate ranging from 10.0% to 11.5% for each reporting unit in determining the discounted cash flows in our fair value analysis.

In estimating fair value using the market approach, we identify a group of comparable publicly-traded companies for each reporting unit that are similar in terms of size and product offering. These groups of comparable companies are used to develop multiples based on total market-based invested capital as a multiple of earnings before interest, taxes, depreciation and amortization (“EBITDA”). We determine our estimated values by applying these comparable EBITDA multiples to the operating results of our reporting units. The ultimate fair value of each reporting unit is determined considering the results of both valuation methods.

A 10% decrease in the fair values determined in the quantitative impairment assessment for each of the reporting units would not have changed our determination that the fair value of each reporting unit was in excess of its carrying value for 2021.

In 2020, we recognized a pre-tax, non-cash goodwill impairment expense of $212.3 million related to the Thermal Management reporting unit. The impairment resulted in a $21.6 million income tax benefit associated with the proportionate share of tax deductible goodwill. We did not recognize any goodwill impairment expense in 2021 or 2019.

There is a risk that changes in economic and operating conditions affecting the assumptions used in our impairment tests, including changes due to the evolving nature of the COVID-19 pandemic, could adversely affect future estimates or fair value and result in additional goodwill or other intangible asset impairment expense in the future.

Identifiable intangible assets
Our primary identifiable intangible assets include: customer relationships, trade names, proprietary technologies and patents. Identifiable intangibles with definite lives are amortized and those identifiable intangibles with indefinite lives are not amortized. Identifiable intangible assets that are subject to amortization are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Identifiable intangible assets not subject to amortization are tested for impairment annually or more frequently if events warrant. We complete our annual impairment test during the fourth quarter each year for those identifiable assets not subject to amortization.

The impairment test for trade names consists of a comparison of the fair value of the trade name with its carrying value. Fair value is measured using the relief-from-royalty method. This method assumes the trade name has value to the extent that the owner is relieved of the obligation to pay royalties for the benefits received from them. This method requires us to estimate the future revenue for the related brands, the appropriate royalty rate and the weighted average cost of capital. We utilized a royalty rate ranging from 1.0% to 5.5% for each trade name in our fair value analysis.

A 10% decrease in the fair values determined in the quantitative impairment assessment for each of the trade names would not have changed our determination that the fair value of each trade name was in excess of its carrying value for 2021.

In 2020, we recognized pre-tax, non-cash impairment expense of $8.2 million related to trade names. There was no impairment expense recorded in 2021 or 2019 for identifiable intangible assets.

Pension and other post-retirement plans
We sponsor defined-benefit pension plans and a post-retirement health plan. The defined benefit plans cover certain non-U.S. employees and retirees and the pension benefits are based principally on an employee's years of service and/or compensation levels near retirement.

The amounts recognized in our consolidated financial statements related to our defined-benefit pension and other post-retirement plans are determined from actuarial valuations. Inherent in these valuations are assumptions, including: expected return on plan assets, discount rates and rate of increase in future compensation levels. These assumptions are updated annually and are disclosed for our Direct Plans in ITEM 8, Note 12 to the Notes to Consolidated Financial Statements. Differences in actual experience or changes in assumptions may affect our pension and other post-retirement obligations and future expense.

We recognize changes in the fair value of plan assets and net actuarial gains or losses for pension and other post-retirement benefits annually in the fourth quarter each year (“mark-to-market adjustment”) and, if applicable, in any quarter in which an interim remeasurement is triggered. Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension and other post-retirement plans or when assumptions change, as they may each year. The primary factors contributing to actuarial gains and losses each year are (1) changes in the discount rate used to value pension and other post-retirement benefit obligations as of the measurement date and (2) differences between the expected and the actual return on plan assets. This accounting method also results in the potential for volatile and difficult to forecast mark-to-market adjustments. Mark-to-market adjustments resulted in a pre-tax gain of $15.2 million in 2021 and a pre-tax expense of $8.7 million and $27.3 million in 2020 and 2019, respectively. The remaining components of pension expense, including service and interest costs and estimated return on plan assets, are recorded on a quarterly basis as ongoing pension expense.

Discount rates
The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our December 31 measurement date. The discount rates on our pension plans ranged from 0.25% to 3.25%, 0.00% to 2.75% and 0.25% to 3.25% in 2021, 2020 and 2019, respectively. The discount rates are determined by matching high-quality, fixed-income debt instruments with maturities corresponding to the expected timing of benefit payments as of the annual measurement date for each of the various plans. There are no known or anticipated changes in our discount rate assumptions that will materially impact our pension expense in 2022.

Expected rates of return
The expected rates of return on our pension plan assets ranged from 1.00% to 4.50%, 1.00% to 5.00% and 1.00% to 5.25% in 2021, 2020 and 2019, respectively. The expected rate of return is designed to be a long-term assumption that may be subject to considerable year-to-year variance from actual returns. In developing the expected long-term rate of return, we considered our historical returns, with consideration given to forecasted economic conditions, our asset allocations, input from external consultants and broader long-term market indices. Any difference in the expected rate and actual returns will be included with the actuarial gain or loss recorded in the fourth quarter when our plans are remeasured.

Sensitivity to changes in key assumptions
A 0.25 percentage point change in the discount rates used to measure our pension and other post-retirement benefit plans is estimated to have an impact on our total projected benefit obligation of approximately $11 million. A 0.25 percentage point change in the assumed rate of return on pension assets or discount rates for our pension and other post-retirement benefit plans is estimated to have no material impact on our ongoing pension expense. These estimates exclude any potential mark-to-market adjustments.

Income taxes
In determining taxable income for financial statement purposes, we must make certain estimates and judgments. These estimates and judgments affect the calculation of certain tax liabilities and the determination of the recoverability of certain of the deferred tax assets, which arise from temporary differences between the tax and financial statement recognition of revenue and expense. In evaluating our ability to recover our deferred tax assets we consider all available positive and negative evidence including our past operating results, the existence of cumulative losses in the most recent years and our forecast of future taxable income. In estimating future taxable income, we develop assumptions including the amount of future pre-tax operating income, the reversal of temporary differences and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we are using to manage the underlying businesses.

We maintain valuation allowances with respect to our deferred tax assets unless it is more likely than not that all or a portion of such deferred tax assets will be realized. Our income tax expense recorded in the future may be reduced to the extent of decreases in our valuation allowances. The realization of our remaining deferred tax assets is primarily dependent on future taxable income in the appropriate jurisdiction. Any reduction in future taxable income including but not limited to any future restructuring activities may require that we record an additional valuation allowance against our deferred tax assets. An increase in the valuation allowance could result in additional income tax expense in such period and could have a significant impact on our future earnings.

Changes in tax laws and rates could also affect recorded deferred tax assets and liabilities in the future. Management records the effect of a tax rate or law change on nVent's deferred tax assets and liabilities in the period of enactment. Future tax rate or law changes could have a material effect on nVent's financial condition, results of operations or cash flows.

In addition, the calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations in a multitude of jurisdictions across our global operations. We perform reviews of our income tax positions on a quarterly basis and accrue for uncertain tax positions. We recognize potential liabilities and record tax liabilities for anticipated tax audit issues in the tax jurisdictions in which we operate based on our estimate of whether, and the extent to which, additional taxes will be due. These tax liabilities are reflected net of related tax loss carryforwards. As events change or resolution occurs, these liabilities are adjusted, such as in the case of audit settlements with taxing authorities. The ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. If our estimate of tax liabilities proves to be less than the ultimate assessment, an additional charge to expense would result. If payment of these amounts ultimately proves to be less than the recorded amounts, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. We recognize the effect of income tax positions only if those positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is more likely than not to be realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the potential economic loss that may result from adverse changes in the fair value of financial instruments. We are exposed to various market risks, including changes in interest rates and foreign currency rates. Periodically, we use derivative financial instruments for the purpose of hedging interest rate and currency exposures. The major accounting policies and utilization of these instruments is described more fully in ITEM 8, Note 1 of the Notes to Consolidated Financial Statements.

Foreign currency risk

We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies in relation to our reporting currency, the U.S. dollar. Periodically, we use derivative financial instruments to manage these risks. The functional currencies of our foreign operating locations are generally the local currency in the country of domicile. We manage these operating activities at the local level and revenues, costs, assets and liabilities are generally denominated in local currencies, thereby mitigating the risk associated with changes in foreign exchange. However, our results of operations and assets and liabilities are reported in U.S. dollars and thus will fluctuate with changes in exchange rates between such local currencies and the U.S. dollar.

From time to time, we may enter into foreign currency contracts to hedge certain foreign currency risks. As the majority of our foreign currency contracts have an original maturity date of less than one year, there is no material risk of fluctuations in the value of these contracts. Counterparties to all derivative contracts are major financial institutions. All instruments are entered into for other than trading purposes.

At December 31, 2021 and 2020, we had outstanding foreign currency derivative contracts, including those related to cross currency swaps that qualify as a hedge of future cash flows, with gross notional U.S. dollar equivalent amounts of $482.2 million and $297.3 million, respectively. Changes in the fair value of all derivatives that do not qualify as a hedge of future cash flows are recognized immediately in income. Gains and losses related to a hedge are deferred and recorded in the Consolidated Balance Sheets as a component of *Accumulated other comprehensive income (loss)* and subsequently recognized in the Consolidated Statements of Operations and Comprehensive Income (Loss) when the hedged item affects earnings.

At December 31, 2021 and 2020, we had a gross notional U.S. dollar equivalent amount of $68.1 million and $73.5 million designated as a net investment hedge for a portion of our net investment in our Euro denominated subsidiaries. The hedge is intended to reduce, but will not eliminate, the impact on our financial results of changes in the exchange rate between the Euro and the U.S. dollar. The currency risk related to the net investment hedge is measured by estimating the potential impact of a 10% change in the value of the U.S. dollar relative to the Euro. The rates used to perform this analysis were based on the market exchange rates in effect on December 31, 2021. A 10% appreciation or depreciation of the U.S. dollar relative to the Euro would result in a $6.2 million net increase or a $7.6 million net decrease, respectively, in *Accumulated other comprehensive income (loss)*. However, these increases or decreases in *Accumulated other comprehensive income (loss)* would be offset by decreases or increases in the hedged net investments on our balance sheet due to currency translation.

Interest rate risk

Our debt portfolio as of December 31, 2021 was comprised of debt denominated in U.S. dollars. The debt portfolio is comprised of approximately 80% fixed-rate debt and 20% variable-rate debt. Changes in interest rates have different impacts on the fixed and variable-rate portions of our debt portfolio. A change in interest rates on the fixed portion of the debt portfolio impacts the fair value, but has no impact on interest incurred or cash flows. A change in interest rates on the variable portion of the debt portfolio impacts the interest incurred and cash flows but does not impact the net financial instrument position.

Based on the fixed-rate debt included in our debt portfolio, as of December 31, 2021, a 100 basis point increase or decrease in interest rates would result in a $56.0 million decrease or a $60.7 million increase in fair value, respectively.

Based on the variable-rate debt included in our debt portfolio as of December 31, 2021, a 100 basis point increase or decrease in interest rates would result in a $2.0 million increase or decrease in interest incurred.

We are also exposed to interest rate risk in connection with the planned issuance of long-term debt. To manage the volatility related to this exposure, we may use forward starting interest rate swap locks to fix a portion of the interest cost associated with anticipated financings. We designate these financial instruments as cash flow hedges at the time the agreements are executed.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of nVent Electric plc and its subsidiaries (the "Company") 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) of the Securities Exchange Act of 1934. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (1) pertain to 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 the 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 the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria for effective internal control over financial reporting described in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management believes that, as of December 31, 2021, the Company's internal control over financial reporting was effective based on those criteria.

Our independent registered public accounting firm, Deloitte & Touche LLP, has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2021. That attestation report is set forth immediately following this management report.

Beth A. Wozniak	Sara E. Zawoyski
Chief Executive Officer	*Executive Vice President and Chief Financial Officer*

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
nVent Electric plc
London, United Kingdom

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of nVent Electric plc and subsidiaries (the "Company") 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 ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements as of and for the year ended December 31, 2021, of the Company and our report dated February 25, 2022, expressed an unqualified opinion on those 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 included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and 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/ Deloitte & Touche LLP

Minneapolis, Minnesota
February 25, 2022

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of
nVent Electric plc
London, United Kingdom

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of nVent Electric plc and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operation and other comprehensive income (loss), changes in equity, and cash flows, for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the 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 three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We have also 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 February 25, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 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 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 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 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 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 financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the 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.

Goodwill - Thermal Management Reporting Unit - Refer to Notes 1 and 6 to the financial statements

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units using income and market approaches. The determination of the fair value using an income approach involves the use of a discounted cash flow model that requires management to make significant estimates and assumptions related to future revenues and expenses, projected capital expenditures, changes in working capital and discount rates. The determination of the fair value using the market approach requires management to make significant assumptions related to earnings before interest, taxes, depreciation, and amortization (EBITDA) multiples. The goodwill balance for the Thermal Management reporting unit was $714.3 million as of December 31, 2021, and no impairment was recognized as the fair value of the reporting unit exceeded its carrying value as of the measurement date.

Given the significant judgments made by management to estimate the fair value of the reporting unit and the difference between their fair value and carrying value, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to selection of the discount rates, EBITDA multiples, and forecasts of future revenues and operating margins, required a high degree of auditor judgment and an increased extent of effort, including the need to involve fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to significant estimates and assumptions for the Thermal Management reporting unit included the following, among others:

- We tested the effectiveness of controls over goodwill, including those over the underlying assumptions to forecast future revenue and operating margins, the selection of the discount rate, and the selection of the EBITDA multiples.
- We evaluated management’s ability to accurately forecast future revenues and operating margins by comparing actual results to management’s historical forecasts.
- We evaluated the reasonableness of management’s forecasts by comparing the forecasts to (1) historical results, (2) internal communications to management and the Board of Directors, and (3) forecasted information included in Company press releases, analyst and industry reports of the Company and companies in its peer group.
- With the assistance of our fair value specialists, we evaluated the discount rate, including testing the underlying source information and the mathematical accuracy of the calculations, and developing a range of independent estimates and comparing those to the discount rate selected by management.
- With the assistance of our fair value specialists, we evaluated the EBITDA multiples used in estimating fair value, including testing the underlying source information and mathematical accuracy of the calculations, and comparing the multiples selected by management to its guideline companies.
- With the assistance of our fair value specialists, we compared the aggregated fair value estimates of the Company’s reporting units to the Company’s market capitalization and evaluated the implied control premium.

/s/ Deloitte & Touche LLP

Minneapolis, Minnesota
February 25, 2022

We have served as the Company's auditor since 2017.

nVent Electric plc
Consolidated Statements of Operations and Comprehensive Income (Loss)

In millions, except per-share data	Years ended December 31 2021	2020	2019
Net sales	$ 2,462.0	$ 1,998.6	$ 2,204.0
Cost of goods sold	1,520.1	1,249.2	1,338.2
Gross profit	941.9	749.4	865.8
Selling, general and administrative	537.9	447.0	484.5
Research and development	48.6	43.5	48.2
Impairment of goodwill and trade names	—	220.5	—
Operating income	355.4	38.4	333.1
Net interest expense	32.3	36.4	44.7
Loss on early extinguishment of debt	15.2	—	—
Other expense (income)	(12.8)	11.5	31.0
Income (loss) before income taxes	320.7	(9.5)	257.4
Provision for income taxes	47.8	37.7	34.7
Net income (loss)	$ 272.9	$ (47.2)	$ 222.7
Comprehensive income (loss), net of tax			
Net income (loss)	$ 272.9	$ (47.2)	$ 222.7
Changes in cumulative translation adjustment	4.4	(3.7)	4.8
Changes in market value of derivative financial instruments, net of tax	7.6	7.1	4.4
Comprehensive income (loss)	$ 284.9	$ (43.8)	$ 231.9
Earnings (loss) per ordinary share			
Basic	$ 1.63	$ (0.28)	$ 1.30
Diluted	$ 1.61	$ (0.28)	$ 1.29
Weighted average ordinary shares outstanding			
Basic	167.9	169.6	171.6
Diluted	169.7	169.6	173.0

See accompanying notes to consolidated financial statements.

nVent Electric plc
Consolidated Balance Sheets

In millions, except per-share data	December 31 2021	2020
Assets		
Current assets		
Cash and cash equivalents	$ 49.5	$ 122.5
Accounts and notes receivable, net of allowances of $6.7 and $6.2, respectively	438.1	313.8
Inventories	321.9	235.2
Other current assets	102.0	92.9
Total current assets	911.5	764.4
Property, plant and equipment, net	291.1	289.4
Other assets		
Goodwill	2,186.7	2,098.2
Intangibles, net	1,143.8	1,105.5
Other non-current assets	141.1	108.6
Total other assets	3,471.6	3,312.3
Total assets	$ 4,674.2	$ 4,366.1
Liabilities and Equity		
Current liabilities		
Current maturities of long-term debt and short-term borrowings	$ 5.0	$ 20.0
Accounts payable	261.0	171.1
Employee compensation and benefits	113.9	70.4
Other current liabilities	256.4	188.5
Total current liabilities	636.3	450.0
Other liabilities		
Long-term debt	994.2	928.0
Pension and other post-retirement compensation and benefits	208.1	237.9
Deferred tax liabilities	210.3	230.1
Other non-current liabilities	129.2	110.3
Total liabilities	2,178.1	1,956.3
Commitments and Contingencies (Note 16)		
Equity		
Ordinary shares $0.01 par value, 400.0 million authorized, 166.1 million and 168.2 million issued at December 31, 2021 and 2020, respectively	1.7	1.7
Additional paid-in capital	2,403.1	2,482.6
Retained earnings	174.5	20.7
Accumulated other comprehensive loss	(83.2)	(95.2)
Total equity	2,496.1	2,409.8
Total liabilities and equity	$ 4,674.2	$ 4,366.1

See accompanying notes to consolidated financial statements.

nVent Electric plc
Consolidated Statements of Cash Flows

	Years ended December 31		
In millions	**2021**	**2020**	**2019**
Operating activities			
Net income (loss)	$ 272.9	$ (47.2)	$ 222.7
Adjustments to reconcile net income to net cash provided by (used for) operating activities			
Depreciation	40.9	38.4	35.4
Amortization	67.5	64.2	61.4
Deferred income taxes	(18.8)	(2.9)	(24.6)
Share-based compensation	16.6	13.9	16.1
Loss on early extinguishment of debt	15.2	—	—
Impairment of goodwill and trade names	—	220.5	—
Pension and other post-retirement expense (income)	(9.5)	17.2	36.5
Pension and other post-retirement contributions	(6.5)	(6.8)	(5.8)
Changes in assets and liabilities, net of effects of business acquisitions			
Accounts and notes receivable	(104.2)	28.3	26.6
Inventories	(74.0)	18.3	0.9
Other current assets	(7.6)	21.5	10.2
Accounts payable	73.7	(18.6)	(7.9)
Employee compensation and benefits	43.6	(4.2)	(6.6)
Other current liabilities	59.3	1.5	(16.9)
Other non-current assets and liabilities	4.2	(0.1)	(11.7)
Net cash provided by (used for) operating activities	373.3	344.0	336.3
Investing activities			
Capital expenditures	(39.5)	(40.0)	(38.8)
Proceeds from sale of property and equipment	0.6	2.0	6.3
Acquisitions, net of cash acquired	(235.1)	(27.0)	(127.8)
Net cash provided by (used for) investing activities	(274.0)	(65.0)	(160.3)
Financing activities			
Net receipts (repayments) of revolving credit facility	72.1	(100.0)	134.6
Proceeds from long-term debt	300.0	—	—
Repayment of long-term debt	(318.7)	(17.5)	(14.1)
Debt issuance costs	(5.4)	—	—
Premium paid on early extinguishment of debt	(15.2)	—	—
Settlement of interest rate swap	9.6	—	—
Dividends paid	(117.7)	(119.0)	(120.7)
Shares issued to employees, net of shares surrendered	20.0	7.2	9.5
Repurchases of ordinary shares	(111.5)	(43.2)	(235.7)
Net cash provided by (used for) financing activities	(166.8)	(272.5)	(226.4)
Effect of exchange rate changes on cash and cash equivalents	(5.5)	9.6	(2.2)
Change in cash and cash equivalents	(73.0)	16.1	(52.6)
Cash and cash equivalents, beginning of year	122.5	106.4	159.0
Cash and cash equivalents, end of year	$ 49.5	$ 122.5	$ 106.4
Supplemental cash flow information			
Cash paid for interest, net	$ 43.0	$ 47.1	$ 52.3
Cash paid for income taxes, net	$ 61.3	$ 39.2	$ 60.8

See accompanying notes to consolidated financial statements.

nVent Electric plc
Consolidated Statements of Changes in Equity

In millions	Ordinary shares Number	Ordinary shares Amount	Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
Balance - December 31, 2018	177.2	$ 1.8	$ 2,709.7	$ 83.4	$ (107.8)	$ 2,687.1
Net income	—	—	—	222.7	—	222.7
Other comprehensive income (loss), net of tax	—	—	—	—	9.2	9.2
Dividends declared	—	—	—	(119.4)	—	(119.4)
Share repurchases	(8.9)	(0.1)	(232.6)	—	—	(232.7)
Exercise of options, net of shares tendered for payment	0.9	—	13.1	—	—	13.1
Issuance of restricted shares, net of cancellations	0.4	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.1)	—	(3.6)	—	—	(3.6)
Share-based compensation	—	—	16.1	—	—	16.1
Balance - December 31, 2019	169.5	$ 1.7	$ 2,502.7	$ 186.7	$ (98.6)	$ 2,592.5
Net loss	—	—	—	(47.2)	—	(47.2)
Other comprehensive income, net of tax	—	—	—	—	3.4	3.4
Dividends declared	—	—	—	(118.8)	—	(118.8)
Share repurchases	(2.3)	—	(43.2)	—	—	(43.2)
Exercise of options, net of shares tendered for payment	0.7	—	11.3	—	—	11.3
Issuance of restricted shares, net of cancellations	0.5	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.2)	—	(4.1)	—	—	(4.1)
Share-based compensation	—	—	15.9	—	—	15.9
Balance - December 31, 2020	168.2	$ 1.7	$ 2,482.6	$ 20.7	$ (95.2)	$ 2,409.8
Net income	—	—	—	272.9	—	272.9
Other comprehensive income, net of tax	—	—	—	—	12.0	12.0
Dividends declared	—	—	—	(119.1)		(119.1)
Share repurchases	(3.5)	—	(116.1)		—	(116.1)
Exercise of options, net of shares tendered for payment	1.2	—	22.9	—	—	22.9
Issuance of restricted shares, net of cancellations	0.3	—	—	—	—	—
Shares surrendered by employees to pay taxes	(0.1)	—	(2.9)	—	—	(2.9)
Share-based compensation	—	—	16.6	—	—	16.6
Balance - December 31, 2021	166.1	$ 1.7	$ 2,403.1	$ 174.5	$ (83.2)	$ 2,496.1

See accompanying notes to consolidated financial statements.

1. Basis of Presentation and Summary of Significant Accounting Policies

Business
nVent Electric plc ("nVent," "we," "us," "our" or the "Company") is a leading global provider of electrical connection and protection solutions. The Company is comprised of three reporting segments: Enclosures, Electrical & Fastening Solutions and Thermal Management.

The Company was incorporated in Ireland on May 30, 2017. Although our jurisdiction of organization is Ireland, we manage our affairs so that we are centrally managed and controlled in the United Kingdom (the "U.K.") and have tax residency in the U.K.

Separation from Pentair
On April 30, 2018, Pentair plc ("Pentair") completed the separation of its Water business and its Electrical business into two independent, publicly-traded companies (the "separation"). To effect the separation, Pentair distributed to its shareholders one ordinary share of nVent for every ordinary share of Pentair held as of the record date of April 17, 2018. As a result of the distribution, nVent became an independent publicly-traded company and began trading under the symbol "NVT" on the New York Stock Exchange on May 1, 2018.

Basis of presentation
The consolidated financial statements have been prepared in United State ("U.S.") dollars ("USD") and in accordance with accounting principles generally accepted in the United States of America ("GAAP"). Intercompany accounts and transactions have been eliminated.

Revenues, expenses, cash flows, assets and liabilities can and do vary during each quarter of the year.

Fiscal year
Our fiscal year ends on December 31. We report our interim quarterly periods on a calendar quarter basis.

Use of estimates
The preparation of our consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in these consolidated financial statements and accompanying notes, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates include our accounting for valuation of goodwill and indefinite lived intangible assets, estimated losses on accounts receivable, estimated realizable value on excess and obsolete inventory, over-time revenue recognition, assets acquired and liabilities assumed in acquisitions, contingent liabilities, income taxes and pension and other post-retirement benefits. Actual results could differ from our estimates.

Revenue recognition
Revenue is recognized when control of the promised goods or services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for transferring those goods or providing services. We account for a contract when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

When determining whether the customer has obtained control of the goods or services, we consider any future performance obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in Accounting Standards Codification 606 - Revenue from Contracts with Customers. Generally, there is no post-shipment obligation on product sold other than warranty obligations in the normal and ordinary course of business, except where our products are utilized in projects where additional services such as installation are performed.

Contract transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The majority of our contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct. For contracts with multiple performance obligations, stand-alone selling price is generally readily observable.

Our performance obligations are satisfied at a point in time or over time as work progresses. Revenue from products and services transferred to customers at a point in time accounted for 73%, 75% and 73% of our revenue for the years ended December 31, 2021, 2020 and 2019, respectively. Revenue on these contracts is recognized when obligations under the terms of the contract with our customer are satisfied; generally this occurs with the transfer of control upon shipment.

Revenue from products and services transferred to customers over time accounted for 27%, 25% and 27% of our revenue for the years ended December 31, 2021, 2020 and 2019, respectively. For the majority of our revenue recognized over time, we use an input measure to determine progress towards completion. Under this method, sales and gross profit are recognized as work is performed generally based on the relationship between the actual costs incurred and the total estimated costs at completion ("the cost-to-cost method") or based on efforts for measuring progress towards completion in situations in which this approach is more representative of the progress on the contract than the cost-to-cost method. Contract costs include labor, material, overhead and, when appropriate, general and administrative expenses. Changes to the original estimates may be required during the life of the contract and such estimates are reviewed on a regular basis. Sales and gross profit are adjusted using the cumulative catch-up method for revisions in estimated total contract costs. These reviews have not resulted in adjustments that were significant to our results of operations. For performance obligations related to long-term contracts, when estimates of total costs to be incurred on a performance obligation exceed total estimates of revenue to be earned, a provision for the entire loss on the performance obligation is recognized in the period the loss is determined.

We use an output method to measure progress towards completion for certain of our Enclosures businesses, as this method appropriately depicts performance towards satisfaction of the performance obligation. Under the output method, revenue is recognized based on number of units produced.

We apply a practical expedient to expense incremental costs of obtaining a contract when incurred because the amortization period would be less than one year. These costs primarily relate to sales commissions and are recorded in *Selling, general and administrative* in the Consolidated Statements of Operations and Comprehensive Income (Loss). Further, we do not adjust the promised amount of consideration for the effects of a significant financing component if we expect, at contract inception, that the period between when we transfer a promised good or service to a customer and when the customer pays for that good or service will be less than one year.

Sales returns
The right of return may exist explicitly or implicitly with our customers. Our return policy allows for customer returns only upon our authorization. Goods returned must be product we continue to market and must be in salable condition. When the right of return exists, we adjust the transaction price for the estimated effect of returns. We estimate the expected returns based on historical sales levels, the timing and magnitude of historical sales return levels as a percent of sales, type of product, type of customer and a projection of this experience into the future.

Pricing and sales incentives
Our sales contracts may give customers the option to purchase additional goods or services priced at a discount. This can come in many forms, such as customer programs and incentive offerings including pricing arrangements, promotions and other volume-based incentives.

We reduce the transaction price for certain customer programs and incentive offerings including pricing arrangements, promotions and other volume-based incentives that represent variable consideration. Sales incentives given to our customers are recorded using either the expected value method or most likely amount approach for estimating the amount of consideration to which nVent shall be entitled. The expected value is the sum of probability-weighted amounts in a range of possible consideration amounts. An expected value is an appropriate estimate of the amount of variable consideration when there are a large number of contracts with similar characteristics. The most likely amount is the single most likely amount in a range of possible consideration amounts (that is, the single most likely outcome of the contract). The most likely amount is an appropriate estimate of the amount of variable consideration if the contract has limited possible outcomes (for example, an entity either achieves a performance bonus or does not).

Pricing is established at or prior to the time of sale with our customers and we record sales at the agreed-upon net selling price. However, certain of our businesses allow customers to apply for a refund of a percentage of the original purchase price if they can demonstrate sales to a qualifying end customer. We use the expected value method to estimate the anticipated refund to be paid based on historical experience and the transaction price is reduced for the probable cost of the discount.

Volume-based incentives involve rebates that are negotiated at or prior to the time of sale with the customer and are redeemable only if the customer achieves a specified cumulative level of sales or sales increase. Under these incentive programs, at the time of sale, we estimate the anticipated rebate to be paid based on forecasted sales levels. These forecasts are updated at least quarterly for each customer and the transaction price is reduced for the anticipated cost of the rebate. If the forecasted sales for a customer changes, the accrual for rebates is adjusted to reflect the new amount of rebates expected to be earned by the customer.

Shipping and handling costs
Amounts billed to customers for shipping and handling activities after the customer obtains control are treated as a promised service performance obligation and recorded in *Net sales* in the Consolidated Statements of Operations and Comprehensive Income (Loss). Shipping and handling costs incurred by nVent for the delivery of goods to customers are considered a cost to

fulfill the contract and are included in *Cost of goods sold* in the Consolidated Statements of Operations and Comprehensive Income (Loss).

Contract assets and liabilities
Contract assets consist of unbilled amounts resulting from sales under long-term contracts when the cost-to-cost method of revenue recognition is utilized and revenue recognized exceeds the amount billed to the customer, such as when the customer retains a small portion of the contract price until completion of the contract. We typically receive interim payments on sales under long-term contracts as work progresses, although for some contracts, we may be entitled to receive an advance payment. Contract liabilities consist of advanced payments and billings in excess of costs incurred and deferred revenue.

Contract assets are recorded within *Other current assets* and contract liabilities are recorded within *Other current liabilities* in the Consolidated Balance Sheets.

Research and development
We conduct research and development activities in our own facilities, which consist primarily of the development of new products, product applications and manufacturing processes.

Cash equivalents
We consider highly liquid investments with original maturities of three months or less at the date of acquisition to be cash equivalents.

Trade receivables and concentration of credit risk
We record an allowance for doubtful accounts to reduce our receivables balance by the amount that is estimated to be uncollectible from our customers, or the expected loss. Estimates used in determining the allowance for doubtful accounts are based on historical collection experience, including write-offs and recoveries, periodic credit evaluations of our customers' financial situation, and current circumstances as well as reasonable and supportable forecasts of future economic conditions. We generally do not require collateral. No customer receivable balances exceeded 10% of total net receivable balances as of December 31, 2021 or 2020.

Inventories
Inventories are stated at the lower of cost or net realizable value with substantially all inventories recorded using the first-in, first-out cost method.

Property, plant and equipment, net
Property, plant and equipment is stated at historical cost. We compute depreciation by the straight-line method based on the following estimated useful lives:

	Years
Land improvements	5 to 20
Buildings and leasehold improvements	5 to 50
Machinery and equipment	3 to 15

Significant improvements that add to productive capacity or extend the lives of properties are capitalized. Costs for repairs and maintenance are charged to expense as incurred. When property is retired or otherwise disposed of, the recorded cost of the assets and their related accumulated depreciation are removed from the Consolidated Balance Sheets and any related gains or losses are included in income.

We review the recoverability of long-lived assets to be held and used, such as property, plant and equipment, when events or changes in circumstances occur that indicate the carrying value of the asset or asset group may not be recoverable. The assessment of possible impairment is based on our ability to recover the carrying value of the asset or asset group from the expected future pre-tax cash flows (undiscounted and without interest charges) of the related operations. If these cash flows are less than the carrying value of such asset or asset group, an impairment loss is recognized for the difference between estimated fair value and carrying value. Impairment losses on long-lived assets held for sale are determined in a similar manner, except that fair values are reduced for the cost to dispose of the assets. The measurement of impairment requires us to estimate future cash flows and the fair value of long-lived assets. We recorded no material impairment expense in 2021, 2020 or 2019 related to long-lived assets.

The following table presents geographic *Property, plant and equipment, net* by region as of December 31:

In millions	2021	2020
U.S. & Canada	$ 159.1	$ 159.0
Mexico	37.2	39.6
EMEA [1]	72.1	78.8
Rest of World [2]	22.7	12.0
Consolidated	$ 291.1	$ 289.4

[1] EMEA includes Europe, Middle East and Africa
[2] Rest of World includes Latin America and Asia-Pacific

Goodwill and identifiable intangible assets

Goodwill

Goodwill represents the excess of the cost of acquired businesses over the net of the fair value of identifiable tangible net assets and identifiable intangible assets purchased and liabilities assumed.

Goodwill is tested annually for impairment as of the first day of the fourth quarter, and is tested for impairment more frequently if events or changes in circumstances indicate that the asset might be impaired. The impairment test is performed by comparing the fair value of each reporting unit with its carrying amount, and recognizing an impairment expense for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

The fair value of each reporting unit is determined using a discounted cash flow analysis and market approach. Determining the fair value of the reporting units required the use of significant judgment, including assumptions about future revenues and expenses, capital expenditures and changes in working capital and discount rates, which are based on our annual operating plan and long-term business plan. These plans take into consideration numerous factors including historical experience, anticipated future economic conditions, including the impacts from the COVID-19 pandemic and growth expectations for the industries and end markets in which the reporting unit participates. The level of judgment and estimation is inherently high.We have evaluated numerous factors and made significant assumptions, which include the severity and duration of the business disruption, the potential impact on customer demand, the timing and degree of economic recovery and ultimately, the combined effect of these assumptions on our future operating results and cash flows. Inputs used to estimate these fair values included significant unobservable inputs that reflect the Company’s assumptions about the inputs that market participants would use and, therefore, the fair value assessments are classified within Level 3 of the fair value hierarchy defined by the accounting guidance.

In estimating fair value using the market approach, we identify a group of comparable publicly-traded companies for each reporting unit that are similar in terms of size and product offering. These groups of comparable companies are used to develop multiples based on total market-based invested capital as a multiple of earnings before interest, taxes, depreciation and amortization (“EBITDA”). We determine our estimated values by applying these comparable EBITDA multiples to the operating results of our reporting units. The ultimate fair value of each reporting unit is determined considering the results of both valuation methods.

In 2020, we recognized a pre-tax, non-cash goodwill impairment expense of $212.3 million related to the Thermal Management reporting unit. The impairment resulted in a $21.6 million income tax benefit associated with the proportionate share of tax deductible goodwill. The impairment expense is included in *Impairment of goodwill and trade names* on the Consolidated Statements of Operations and Comprehensive Income (Loss). There was no impairment expense recorded in 2021 or 2019 related to goodwill.

Identifiable intangible assets

Our primary identifiable intangible assets include customer relationships, trade names, proprietary technologies and patents. Identifiable intangibles with definite lives are amortized and those identifiable intangibles with indefinite lives are not amortized. Identifiable intangible assets that are subject to amortization are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Identifiable intangible assets not subject to amortization are tested for impairment annually or more frequently if events warrant. We complete our annual impairment test during the fourth quarter each year for those identifiable assets not subject to amortization.

The impairment test for trade names consists of a comparison of the fair value of the trade name with its carrying value. Fair value is measured using the relief-from-royalty method. This method assumes the trade name has value to the extent that the owner is relieved of the obligation to pay royalties for the benefits received from them. This method requires us to estimate the future revenue for the related brands, the appropriate royalty rate and the weighted average cost of capital. The non-recurring fair value measurement is a Level 3 measurement under the fair value hierarchy described below.

In 2020, we recognized a pre-tax, non-cash impairment expense of $8.2 million related to trade names. The impairment expense was recorded in *Impairment of goodwill and trade names* in our Consolidated Statements of Operations and Comprehensive Income (Loss). There was no impairment expense recorded in 2021 or 2019 related to identifiable intangible assets.

Income taxes
We use the asset and liability approach to account for income taxes. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences of differences between the carrying amounts of assets and liabilities and their respective tax bases using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period when the change is enacted. We maintain valuation allowances unless it is more likely than not that all or a portion of the deferred tax assets will be realized. Changes in valuation allowances from period to period are included in our tax provision in the period of change. We recognize the effect of income tax positions only if those positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is more likely than not to be realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs.

Pension and other post-retirement plans
We sponsor defined-benefit pension plans and a post-retirement health plan. The pension and other post-retirement benefit costs for these plans are determined from actuarial assumptions and methodologies, including discount rates and expected returns on plan assets. These assumptions are updated annually and are disclosed in Note 12.

We recognize changes in the fair value of plan assets and net actuarial gains or losses for pension and other post-retirement benefits annually in the fourth quarter each year (“mark-to-market adjustment”) and, if applicable, in any quarter in which an interim remeasurement is triggered. Net actuarial gains and losses occur when the actual experience differs from any of the various assumptions used to value our pension and other post-retirement plans or when assumptions change, as they may each year. The remaining components of pension expense, including service and interest costs and estimated return on plan assets, are recorded on a quarterly basis.

Earnings (loss) per ordinary share
Basic earnings (loss) per share are computed by dividing net income (loss) by the weighted-average number of ordinary shares outstanding. Diluted earnings (loss) per share are computed by dividing net income (loss) by the weighted-average number of ordinary shares outstanding including the dilutive effects of ordinary share equivalents.

Derivative financial instruments
We recognize all derivatives, including those embedded in other contracts, as either assets or liabilities at fair value in our Consolidated Balance Sheets. If the derivative is designated and is effective as a cash-flow hedge, the effective portion of changes in the fair value of the derivative are recorded in *Accumulated other comprehensive income (loss)* ("AOCI") as a separate component of equity in the Consolidated Balance Sheets and are recognized in the Consolidated Statements of Operations and Comprehensive Income (Loss) when the hedged item affects earnings. For a derivative that is not designated as or does not qualify as a hedge, changes in fair value are reported in earnings immediately.

Gains and losses on net investment hedges are included in AOCI as a separate component of equity in the Consolidated Balance Sheets.

We use derivative instruments for the purpose of hedging interest rate and currency exposures, which exist as part of ongoing business operations. We do not hold or issue derivative financial instruments for trading or speculative purposes. All other contracts that contain provisions meeting the definition of a derivative also meet the requirements for the normal purchases and normal sales scope exception. Our policy is not to enter into contracts with terms that cannot be designated as normal purchases or sales. From time to time, we may enter into short duration foreign currency contracts to hedge foreign currency risks.

Fair value measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are classified using the following hierarchy, which is based upon the transparency of inputs to the valuation as of the measurement date:

Level 1: Valuation is based on observable inputs such as quoted market prices (unadjusted) for identical assets or liabilities in active markets.

Level 2: Valuation is based on inputs such as quoted market prices for similar assets or liabilities in active markets or other inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3: Valuation is based upon other unobservable inputs that are significant to the fair value measurement.

In making fair value measurements, observable market data must be used when available. When inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement.

Foreign currency translation

The financial statements of subsidiaries located outside of the U.S. are generally measured using the local currency as the functional currency, except for certain corporate entities outside of the U.S. which are measured using USD. Assets and liabilities of these subsidiaries are translated at the rates of exchange at the balance sheet date. Income and expense items are translated at average monthly rates of exchange. The resultant translation adjustments are included in AOCI as a separate component of equity.

Adoption of new accounting standards

Effective January 1, 2020, we adopted Accounting Standards Update No. 2017-04, "Intangibles-Goodwill and Other (Topic 350)". The new standard simplifies the subsequent measurement of goodwill by eliminating the second step of the goodwill impairment test. Instead, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment expense for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

In March 2020, the SEC amended Rule 3-10 of Regulation S-X regarding financial disclosure requirements for registered debt offerings involving subsidiaries as either issuers or guarantors. This amended rule narrows the circumstances that require separate financial statements or summarized financial disclosures of subsidiary issuers and guarantors and simplifies the summarized disclosures required in lieu of those statements. As a result of this amended rule, we have included narrative disclosures in lieu of separate financial statements and summarized financial disclosures as amounts presented would not be material because the guarantor and subsidiary issuer do not have material independent assets and operations unrelated to investments in consolidated subsidiaries.

2. Revenue

Disaggregation of revenue

We disaggregate our revenue from contracts with customers by geographic location and vertical, as we believe these best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors.

Geographic net sales information, based on geographic destination of the sale, was as follows:

	Year ended December 31, 2021			
In millions	**Enclosures**	**Electrical & Fastening Solutions**	**Thermal Management**	**Total**
U.S. and Canada	$ 792.6	$ 464.2	$ 305.5	$ 1,562.3
Developed Europe [1]	309.4	133.3	125.7	568.4
Developing [2]	125.1	41.7	113.9	280.7
Other Developed [3]	17.7	18.3	14.6	50.6
Total	$ 1,244.8	$ 657.5	$ 559.7	$ 2,462.0

	Year ended December 31, 2020			
In millions	**Enclosures**	**Electrical & Fastening Solutions**	**Thermal Management**	**Total**
U.S. and Canada	$ 618.7	$ 416.1	$ 260.2	$ 1,295.0
Developed Europe [1]	238.2	104.8	128.7	471.7
Developing [2]	82.3	33.3	74.1	189.7
Other Developed [3]	13.7	14.9	13.6	42.2
Total	$ 952.9	$ 569.1	$ 476.6	$ 1,998.6

	Year ended December 31, 2019			
In millions	**Enclosures**	**Electrical & Fastening Solutions**	**Thermal Management**	**Total**
U.S. and Canada	$ 715.5	$ 414.7	$ 351.9	$ 1,482.1
Developed Europe [1]	212.5	109.3	136.3	458.1
Developing [2]	92.5	42.0	87.7	222.2
Other Developed [3]	13.3	13.6	14.7	41.6
Total	$ 1,033.8	$ 579.6	$ 590.6	$ 2,204.0

[1] Developed Europe includes Western Europe and Eastern Europe included in European Union.

[2] Developing includes China, Eastern Europe not included in European Union, Latin America, Middle East and Southeast Asia.

[3] Other Developed includes Australia and Japan.

Vertical net sales information was as follows:

	Year ended December 31, 2021			
In millions	**Enclosures**	**Electrical & Fastening Solutions**	**Thermal Management**	**Total**
Industrial	$ 739.2	$ 67.8	$ 255.4	$ 1,062.4
Commercial & Residential	143.5	339.2	194.6	677.3
Infrastructure	267.7	223.4	23.4	514.5
Energy	94.4	27.1	86.3	207.8
Total	$ 1,244.8	$ 657.5	$ 559.7	$ 2,462.0

In millions	Year ended December 31, 2020 Enclosures	Electrical & Fastening Solutions	Thermal Management	Total
Industrial	$ 582.3	$ 54.8	$ 215.6	$ 852.7
Commercial & Residential	111.1	299.3	161.0	571.4
Infrastructure	187.0	192.0	22.9	401.9
Energy	72.5	23.0	77.1	172.6
Total	$ 952.9	$ 569.1	$ 476.6	$ 1,998.6

In millions	Year ended December 31, 2019 Enclosures	Electrical & Fastening Solutions	Thermal Management	Total
Industrial	$ 623.2	$ 58.4	$ 287.8	$ 969.4
Commercial & Residential	113.2	311.0	184.1	608.3
Infrastructure	194.0	187.0	26.6	407.6
Energy	103.4	23.2	92.1	218.7
Total	$ 1,033.8	$ 579.6	$ 590.6	$ 2,204.0

During 2021, based on benchmarking of industry peers and for purposes of how we assess performance, we determined that revenue in our power utilities, datacom and renewables sub-verticals was better aligned with the infrastructure vertical, rather than the industrial, commercial & residential and energy verticals, where it was previously reported. Further, we determined that revenue in our chemical and petrochemical sub-verticals was better aligned with the industrial vertical, rather than the energy vertical, where it was previously reported. For comparability, we have reclassified revenue for the years ended December 31, 2020 and 2019 to conform to the new presentation. This reclassification of revenue by vertical had no impact on our consolidated financial results.

Contract balances

Contract assets and liabilities consisted of the following:

In millions	December 31, 2021	December 31, 2020	$ Change	% Change
Contract assets	$ 48.9	$ 45.6	$ 3.3	7.2 %
Contract liabilities	17.8	11.3	6.5	57.5 %
Net contract assets	$ 31.1	$ 34.3	$ (3.2)	(9.3 %)

In millions	December 31, 2020	December 31, 2019	$ Change	% Change
Contract assets	$ 45.6	$ 69.4	$ (23.8)	(34.3 %)
Contract liabilities	11.3	13.7	(2.4)	(17.5 %)
Net contract assets	$ 34.3	$ 55.7	$ (21.4)	(38.4 %)

The $3.2 million and the $21.4 million decreases in net contract assets in 2021 and 2020, respectively, were primarily the result of timing of milestone payments. The majority of our contract liabilities at December 31, 2020 and 2019 were recognized in revenue as of December 31, 2021 and December 31, 2020, respectively. There were no material impairment losses recognized on our contract assets for the twelve months ended December 31, 2021 and 2020.

Remaining performance obligations

We have elected the practical expedient to disclose only the value of remaining performance obligations for contracts with an original expected length of one year or more. On December 31, 2021, we had $36.1 million of remaining performance obligations on contracts with original expected duration of one year or more. We expect to recognize the majority of our remaining performance obligations on these contracts within the next twelve to eighteen months.

3. Restructuring

During 2021, 2020 and 2019, we initiated and continued execution of certain business restructuring initiatives aimed at reducing our fixed cost structure and realigning our business. Additionally in 2020, we initiated certain actions in response to the decrease in expected demand attributed to the effects of the COVID-19 pandemic and significant volatility in oil and gas prices. Restructuring initiatives during the years ended December 31, 2021, 2020 and 2019 included a reduction in hourly and salaried headcount of approximately 85, 500 and 400 employees, respectively.

Restructuring related costs included in *Selling, general and administrative* in the Consolidated Statements of Operations and Comprehensive Income (Loss) included costs for severance and other restructuring costs as follows:

	Years ended December 31		
In millions	**2021**	**2020**	**2019**
Severance and related costs	$ 4.9	$ 15.0	$ 19.6
Other	3.9	2.7	2.3
Total restructuring costs	$ 8.8	$ 17.7	$ 21.9

Other restructuring costs primarily consist of asset impairment and various contract termination costs.

Restructuring costs by reportable segment were as follows:

	Years ended December 31		
In millions	**2021**	**2020**	**2019**
Enclosures	$ 6.0	$ 8.5	$ 5.3
Electrical & Fastening Solutions	0.7	1.0	2.2
Thermal Management	1.4	6.2	6.6
Other	0.7	2.0	7.8
Consolidated	$ 8.8	$ 17.7	$ 21.9

Activity related to accrued severance and related costs recorded in *Other current liabilities* in the Consolidated Balance Sheets is summarized as follows:

	Years ended December 31	
In millions	**2021**	**2020**
Beginning balance	$ 6.6	$ 9.5
Costs incurred	4.9	15.0
Cash payments and other	(9.1)	(17.9)
Ending balance	$ 2.4	$ 6.6

4. Earnings (Loss) Per Share

Basic and diluted earnings (loss) per share were calculated as follows:

	Years ended December 31		
In millions, except per share data	2021	2020	2019
Net income (loss)	$ 272.9	$ (47.2)	$ 222.7
Weighted average ordinary shares outstanding			
Basic	167.9	169.6	171.6
Dilutive impact of stock options, restricted stock units and performance share units	1.8	—	1.4
Diluted	169.7	169.6	173.0
Earnings (loss) per ordinary share			
Basic earnings (loss) per ordinary share	$ 1.63	$ (0.28)	$ 1.30
Diluted earnings (loss) per ordinary share	$ 1.61	$ (0.28)	$ 1.29
Anti-dilutive stock options excluded from the calculation of diluted earnings (loss) per share	0.6	4.2	2.1

As a result of the Company's net loss during the year ended December 31, 2020, 0.7 million of outstanding stock options, restricted stock units and performance share units were not included in the computation of diluted earnings (loss) per share because the effect would have been anti-dilutive.

5. Acquisitions

On August 30, 2019, we completed the acquisition of Eldon Holding AB ("Eldon") for $127.8 million, net of cash acquired. Eldon, now part of our Enclosures segment, is an innovative European based manufacturer of enclosures that protect sensitive electrical, electronic and data and telecommunications components.

The excess purchase price over tangible net assets and identified intangible assets acquired has been allocated to goodwill in the amount of $51.2 million, none of which is expected to be deductible for income tax purposes. Identifiable intangible assets acquired included $46.7 million of definite-lived customer relationships with an estimated useful life of 17 years.

On February 10, 2020, we acquired substantially all of the assets of WBT LLC ("WBT") for $29.9 million in cash. The U.S. based WBT business manufactures high-quality cable tray systems that will be marketed as part of the nVent CADDY product line within our Electrical and Fastening Solutions segment and nVent HOFFMAN product line within our Enclosures segment.

The excess purchase price over tangible net assets and identified intangible assets acquired has been preliminarily allocated to goodwill in the amount of $13.7 million, substantially all of which is expected to be deductible for income tax purposes. Identifiable intangible assets acquired included $11.3 million of definite-lived customer relationships with an estimated useful life of 12 years.

On April 1, 2021, we acquired substantially all of the assets of Vynckier Enclosure Systems, Inc. ("Vynckier") for approximately $27.0 million in cash. Vynckier is a U.S. based manufacturer of high-quality non-metallic enclosures that we market as part of the nVent HOFFMAN product line within our Enclosures segment.

The excess purchase price over tangible net assets and identified intangible assets acquired has been preliminarily allocated to goodwill in the amount of $13.5 million, substantially all of which is expected to be deductible for income tax purposes. Identifiable intangible assets acquired included $6.1 million of definite-lived customer relationships with an estimated useful life of 11 years. The preliminary purchase price allocation is subject to further refinement and may require adjustments to arrive at the final purchase price allocation, primarily related to the impacts associated with income taxes and other accruals.

On June 30, 2021, we acquired CIS Global LLC ("CIS Global") for approximately $202.4 million in cash. The CIS Global business is a leading provider of intelligent rack power distribution and server slides products, and operates within our Enclosures segment. The purchase price was funded primarily through borrowings under our Revolving Credit Facility (as defined in Note 9).

The excess purchase price over tangible net assets and identified intangible assets acquired has been preliminarily allocated to goodwill in the amount of $83.3 million, of which $30.9 million is expected to be deductible for income tax purposes.

Identifiable intangible assets acquired included $78.0 million of definite-lived customer relationships with an estimated useful life of 16 years and $24.5 million of developed technology with an estimated useful life of 9 years to 12 years. The preliminary purchase price allocation is subject to further refinement and may require significant adjustments to arrive at the final purchase price allocation, primarily related to the impacts associated with income taxes and certain working capital accounts.

The pro forma impact of these acquisitions is not material individually or in the aggregate.

6. Goodwill and Other Identifiable Intangible Assets

The changes in the carrying amount of goodwill by reportable segment were as follows:

In millions	December 31, 2020	Acquisitions/ divestitures	Foreign currency translation/other	December 31, 2021
Enclosures	$ 332.1	$ 97.0	$ (8.7)	$ 420.4
Electrical & Fastening Solutions	1,051.9	0.1	—	1,052.0
Thermal Management	714.2	—	0.1	714.3
Total goodwill	$ 2,098.2	$ 97.1	$ (8.6)	$ 2,186.7

In millions	December 31, 2019	Acquisitions/ divestitures	Impairment	Foreign currency translation/other	December 31, 2020
Enclosures	$ 315.4	$ 6.4	$ —	$ 10.3	$ 332.1
Electrical & Fastening Solutions	1,038.2	13.7	—	—	1,051.9
Thermal Management	925.5	—	(212.3)	1.0	714.2
Total goodwill	$ 2,279.1	$ 20.1	$ (212.3)	$ 11.3	$ 2,098.2

In 2020, we recognized pre-tax, non-cash impairment expense of $212.3 million related to goodwill in the Thermal Management reporting unit. There was no impairment expense recorded in 2021 or 2019 related to goodwill.

Identifiable intangible assets consisted of the following at December 31:

	2021			2020		
In millions	Cost	Accumulated amortization	Net	Cost	Accumulated amortization	Net
Definite-life intangibles						
Customer relationships	$ 1,295.4	$ (454.0)	$ 841.4	$ 1,214.5	$ (389.6)	$ 824.9
Proprietary technologies and patents	40.8	(11.5)	29.3	16.3	(8.8)	7.5
Total definite-life intangibles	1,336.2	(465.5)	870.7	1,230.8	(398.4)	832.4
Indefinite-life intangibles						
Trade names	273.1	—	273.1	273.1	—	273.1
Total intangibles	$ 1,609.3	$ (465.5)	$ 1,143.8	$ 1,503.9	$ (398.4)	$ 1,105.5

Identifiable intangible asset amortization expense in 2021, 2020 and 2019 was $67.5 million, $64.2 million and $61.4 million, respectively. In 2020, we recognized pre-tax, non-cash impairment expense of $8.2 million related to trade names. There was no impairment expense recorded in 2021 or 2019 related to trade names.

Estimated future amortization expense for identifiable intangible assets during the next five years is as follows:

In millions	2022	2023	2024	2025	2026
Estimated amortization expense	$ 71.1	$ 70.9	$ 70.3	$ 70.3	$ 70.3

7. Supplemental Balance Sheet Information

	December 31	
In millions	2021	2020
Inventories		
Raw materials and supplies	$ 104.5	$ 67.3
Work-in-process	33.3	24.4
Finished goods	184.1	143.5
Total inventories	$ 321.9	$ 235.2
Other current assets		
Contract assets	$ 48.9	$ 45.6
Prepaid expenses	49.6	29.8
Prepaid income taxes	2.2	13.4
Other current assets	1.3	4.1
Total other current assets	$ 102.0	$ 92.9
Property, plant and equipment, net		
Land and land improvements	$ 39.8	$ 41.0
Buildings and leasehold improvements	184.5	185.5
Machinery and equipment	488.5	461.4
Construction in progress	25.5	30.3
Total property, plant and equipment	738.3	718.2
Accumulated depreciation and amortization	447.2	428.8
Total property, plant and equipment, net	$ 291.1	$ 289.4
Other non-current assets		
Deferred compensation plan assets	$ 21.4	$ 20.0
Lease right-of-use assets	79.1	45.6
Deferred tax assets	14.6	29.8
Other non-current assets	26.0	13.2
Total other non-current assets	$ 141.1	$ 108.6
Other current liabilities		
Dividends payable	$ 30.5	$ 29.4
Accrued rebates	88.2	40.5
Contract liabilities	17.8	11.3
Accrued taxes payable	32.4	32.8
Current lease liabilities	17.4	14.2
Other current liabilities	70.1	60.3
Total other current liabilities	$ 256.4	$ 188.5
Other non-current liabilities		
Income taxes payable	$ 30.3	$ 31.7
Deferred compensation plan liabilities	21.4	20.0
Non-current lease liabilities	66.5	35.7
Other non-current liabilities	11.0	22.9
Total other non-current liabilities	$ 129.2	$ 110.3

8. Accumulated Other Comprehensive Income (Loss)

Components of AOCI consist of the following at December 31:

In millions	2021	2020
Cumulative translation adjustments	$ (99.8)	$ (104.2)
Change in market value of derivative financial instruments, net of tax	16.6	9.0
Accumulated other comprehensive income (loss)	$ (83.2)	$ (95.2)

9. Debt

Debt and the average interest rates on debt outstanding were as follows:

In millions	Average interest rate at December 31, 2021	Maturity year	December 31 2021	December 31 2020
Revolving credit facility	1.353%	2026	$ 106.7	$ 34.6
Senior notes - fixed rate	2.750%	2031	300.0	—
Senior notes - fixed rate	N/A	Redeemed in 2021	—	300.0
Senior notes - fixed rate	4.550%	2028	500.0	500.0
Term loan facility	1.352%	2026	98.8	117.5
Unamortized issuance costs and discounts	N/A	N/A	(6.3)	(4.1)
Total debt			999.2	948.0
Less: Current maturities and short-term borrowings			(5.0)	(20.0)
Long-term debt			$ 994.2	$ 928.0

Senior notes

In March 2018, nVent Finance S.à r.l. (“nVent Finance” or "Subsidiary Issuer"), a 100-percent owned subsidiary of nVent, issued $300.0 million aggregate principal amount of 3.950% senior notes due 2023 (the "2023 Notes") and $500.0 million aggregate principal amount of 4.550% senior notes due 2028 (the "2028 Notes").

In November 2021, nVent Finance issued $300.0 million aggregate principal amount of 2.750% senior notes due 2031 (the "2031 Notes" and, collectively with the 2028 Notes, the "Notes"). In December 2021, the Company redeemed the $300.0 million aggregate principal amount of the 2023 Notes. We incurred costs of $15.2 million related to the early extinguishment of the 2023 Notes, which was recorded as *Loss on the early extinguishment of debt* in the Consolidated Statements of Operations and Comprehensive Income (Loss).

Interest on the 2028 Notes is payable semi-annually in arrears on April 15 and October 15 of each year, and interest on the 2031 Notes is payable semi-annually in arrears on May 15 and November 15 of each year.

The Notes are fully and unconditionally guaranteed as to payment by nVent (the "Parent Company Guarantor"). There are no subsidiaries that guarantee the Notes. The Parent Company Guarantor is a holding company that has no independent assets or operations unrelated to its investments in consolidated subsidiaries. The Subsidiary Issuer is a holding company that has no independent assets or operations unrelated to its investments in consolidated subsidiaries and the issuance of the Notes and other external debt. The Parent Company Guarantor’s principal source of cash flow, including cash flow to make payments on the Notes pursuant to the guarantees, is dividends from its subsidiaries. The Subsidiary Issuer’s principal source of cash flow is interest income from its subsidiaries. None of the subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer is under any direct obligation to pay or otherwise fund amounts due on the Notes or the guarantees, whether in the form of dividends, distributions, loans or other payments. In addition, there may be statutory and regulatory limitations on the payment of dividends from certain subsidiaries of the Parent Company Guarantor or the Subsidiary Issuer. If such subsidiaries are unable to transfer funds to the Parent Company Guarantor or the Subsidiary Issuer and sufficient cash or liquidity is not otherwise available, the Parent Company Guarantor or the Subsidiary Issuer may not be able to make principal and interest payments on their outstanding debt, including the Notes or the guarantees.

The Notes constitute general unsecured senior obligations of the Subsidiary Issuer and rank equally in right of payment with all existing and future unsubordinated and unsecured indebtedness and liabilities of the Subsidiary Issuer. The guarantees of the

Notes by the Parent Company Guarantor constitute general unsecured obligations of the Parent Company Guarantor and rank equally in right of payment with all existing and future unsubordinated and unsecured indebtedness and liabilities of the Subsidiary Issuer. Subject to certain qualifications and exceptions, the indenture pursuant to which the Notes were issued contains covenants that, among other things, restrict nVent's, nVent Finance's and certain subsidiaries' ability to merge or consolidate with another person, create liens or engage in sale and lease-back transactions.

There are no significant restrictions on the ability of nVent to obtain funds from its subsidiaries by dividend or loan. None of the assets of nVent or its subsidiaries represents restricted net assets pursuant to the guidelines established by the Securities and Exchange Commission.

Senior credit facilities
In March 2018, the Company and its subsidiaries nVent Finance and Hoffman Schroff Holdings, Inc. entered into a credit agreement with a syndicate of banks providing for a five-year $200.0 million senior unsecured term loan facility and a five-year $600.0 million senior unsecured revolving credit facility.

In September 2021, the Company and its subsidiaries nVent Finance and Hoffman Schroff Holdings, Inc. entered into an amended and restated credit agreement (the "Credit Agreement") with a syndicate of banks providing for a five-year $300.0 million senior unsecured term loan facility (the "Term Loan Facility") and a five-year $600.0 million senior unsecured revolving credit facility (the "Revolving Credit Facility") and, together with the Term Loan Facility, the "Senior Credit Facilities" which amended and restated the March 2018 credit agreement. Borrowings under the Term Loan Facility are permitted on a delayed draw basis during the first year of the five-year term of the Term Loan Facility, and borrowings under the Revolving Credit Facility are permitted from time to time during the full five-year term of the Revolving Credit Facility. nVent Finance has the option to request to increase the Revolving Credit Facility in an aggregate amount of up to $300.0 million, subject to customary conditions, including the commitment of the participating lenders.

Borrowings under the Senior Credit Facilities bear interest at a rate equal to an adjusted base rate, London Interbank Offered Rate ("LIBOR"), Euro Interbank Offer Rate ("EURIBOR") or Sterling Overnight Index Average ("SONIA"), plus, in each case, an applicable margin. The applicable margin will be based on, at nVent Finance's election, the Company's leverage level or public credit rating.

As of December 31, 2021, the borrowing capacity under the Term Loan Facility on a delayed draw basis was $200.0 million, and the borrowing capacity under the Revolving Credit Facility was $493.3 million.

Our debt agreements contain certain financial covenants, the most restrictive of which are in the Senior Credit Facilities, including that we may not permit (i) the ratio of our consolidated debt (net of our consolidated unrestricted cash in excess of $5.0 million but not to exceed $250.0 million) to our consolidated net income (excluding, among other things, non-cash gains and losses) before interest, taxes, depreciation, amortization and non-cash share-based compensation expense ("EBITDA") on the last day of any period of four consecutive fiscal quarters (each, a "testing period") to exceed 3.75 to 1.00 (or, at nVent Finance's election and subject to certain conditions, 4.25 to 1.00 for four testing periods in connection with certain material acquisitions) and (ii) the ratio of our EBITDA to our consolidated interest expense for the same period to be less than 3.00 to 1.00. In addition, subject to certain qualifications and exceptions, the Senior Credit Facilities also contain covenants that, among other things, restrict our ability to create liens, merge or consolidate with another person, make acquisitions and incur subsidiary debt. As of December 31, 2021, we were in compliance with all financial covenants in our debt agreements, and there is no material uncertainty about our ongoing ability to meet those covenants.

Debt outstanding at December 31, 2021, excluding unamortized issuance costs and discounts, matures on a calendar year basis as follows:

In millions	2022	2023	2024	2025	2026	Thereafter	Total
Contractual debt obligation maturities	$ 5.0	$ 5.0	$ 5.7	$ 7.5	$ 182.3	$ 800.0	$ 1,005.5

10. Derivatives and Financial Instruments

Derivative financial instruments
We are exposed to market risk related to changes in foreign currency exchange rates. To manage the volatility related to this exposure, we periodically enter into a variety of derivative financial instruments. Our objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign currency exchange rates. The derivative contracts contain credit risk to the extent that our bank counterparties may be unable to meet the terms of the

agreements. The amount of such credit risk is generally limited to the unrealized gains, if any, in such contracts. Such risk is minimized by limiting those counterparties to major financial institutions of high credit quality.

Foreign currency contracts
We conduct business in various locations throughout the world and are subject to market risk due to changes in the value of foreign currencies. We manage our economic and transaction exposure to certain market-based risks through the use of derivative instruments. These derivative instruments primarily consist of forward foreign currency contracts used to mitigate foreign currency exposure for certain foreign currency assets and liabilities. Our objective in holding these derivatives is to reduce the volatility in net earnings and cash flows associated with changes in foreign currency rates. The majority of our foreign currency contracts have an original maturity date of less than one year. These foreign currency contracts are not designated as hedging instruments; accordingly, changes in the fair value are recorded in current period earnings.

At December 31, 2021 and 2020, we had outstanding foreign currency derivative contracts with gross notional U.S. dollar equivalent amounts of $180.1 million and $41.8 million, respectively. The impact of these contracts on the Consolidated Statements of Operations and Comprehensive Income (Loss) was not material for any period presented.

Cross currency swaps
At December 31, 2021 and 2020, we had outstanding cross currency swap agreements with a combined notional amount of $369.1 million and $329.0 million, respectively. The agreements are accounted for as either cash flow hedges, to hedge foreign currency fluctuations on certain intercompany debt, or as net investment hedge, to manage our exposure to fluctuations in the Euro-U.S. Dollar exchange rate. At December 31, 2021 and 2020, we had deferred foreign currency gains of $16.7 million and $6.9 million, respectively, in *Accumulated other comprehensive loss* associated with our cross currency swap activity.

Interest rate swaps
We are also exposed to interest rate risk fluctuations in connection with the planned issuance of long-term debt. To manage the volatility related to this exposure, we may use forward starting interest rate swaps to fix a portion of the interest cost associated with anticipated future financings. In 2020, we entered into a forward starting interest rate swap to hedge the variability of cash flows attributable to changes in the benchmark swap interest rate (London Inter-Bank Offer Rate) associated with the anticipated refinancing of the 2023 Notes. The interest rate swap contract had a notional amount of $200 million, and was settled in the fourth quarter of 2021 in conjunction with the issuance of the 2031 Notes. Accordingly, cash flows of $9.6 million relating to the settlement of interest rate swaps hedging the forecasted issuance of debt have been reflected as a component of financing cash flows. The resulting gain from the settlement is deferred to *Accumulated other comprehensive loss*, and is being reclassified to interest expense over the term of the 2031 Notes (underlying debt). This reclassification of the deferred gain impacts the interest expense recognized on the underlying debt that was hedged, and is therefore reflected as a component of operating cash flows in periods subsequent to settlement.

Fair value of financial instruments
The following methods were used to estimate the fair values of each class of financial instrument:

- *short-term financial instruments (cash and cash equivalents, accounts and notes receivable, accounts and notes payable and variable-rate debt)* — recorded amount approximates fair value because of the short maturity period;
- *long-term fixed-rate debt, including current maturities* — fair value is based on market quotes available for issuance of debt with similar terms, which are inputs that are classified as Level 2 in the valuation hierarchy defined by the accounting guidance;
- *cross currency swap, foreign currency contract and interest rate swap agreements* — fair values are determined through the use of models that consider various assumptions, including time value, yield curves, as well as other relevant economic measures, which are observable inputs that are classified as Level 2 in the valuation hierarchy defined by the accounting guidance; and
- *deferred compensation plan assets (mutual funds, common/collective trusts and cash equivalents for payment of certain non-qualified benefits for retired, terminated and active employees)* — fair value of mutual funds and cash equivalents are based on quoted market prices in active markets that are classified as Level 1 in the valuation hierarchy defined by the accounting guidance; fair value of common/collective trusts are valued at net asset value ("NAV"), which is based on the fair value of the underlying securities owned by the fund divided by the number of shares outstanding.

The recorded amounts and estimated fair values of total debt, excluding unamortized issuance costs and discounts, at December 31 were as follows:

In millions	2021 Recorded Amount	2021 Fair Value	2020 Recorded Amount	2020 Fair Value
Variable rate debt	$ 205.5	$ 205.5	$ 152.1	$ 152.1
Fixed rate debt	800.0	866.8	800.0	915.2
Total debt	$ 1,005.5	$ 1,072.3	$ 952.1	$ 1,067.3

Financial assets and liabilities measured at fair value on a recurring basis at December 31 were as follows:

Recurring fair value measurements	2021				
In millions	**Level 1**	**Level 2**	**Level 3**	**NAV**	**Total**
Cross currency swap liabilities	$ —	$ (1.7)	$ —	$ —	$ (1.7)
Cross currency swap assets	—	9.5	—	—	9.5
Foreign currency contract liabilities	—	(0.2)	—	—	(0.2)
Foreign currency contract assets	—	0.4	—	—	0.4
Deferred compensation plan assets	15.5	—	—	5.9	21.4
Total recurring fair value measurements	$ 15.5	$ 8.0	$ —	$ 5.9	$ 29.4

Recurring fair value measurements	2020				
In millions	**Level 1**	**Level 2**	**Level 3**	**NAV**	**Total**
Cross currency swap liabilities	$ —	$ (14.3)	$ —	$ —	$ (14.3)
Foreign currency contract assets	—	0.9	—	—	0.9
Interest rate swap assets	—	2.1	—	—	2.1
Deferred compensation plan assets	15.6	—	—	4.4	20.0
Total recurring fair value measurements	$ 15.6	$ (11.3)	$ —	$ 4.4	$ 8.7

11. Income Taxes

Income (loss) before income taxes consisted of the following:

In millions	Years ended December 31 2021	2020	2019
Federal [1]	$ (23.7)	$ (1.7)	$ (21.1)
International [2]	344.4	(7.8)	278.5
Income (loss) before income taxes	$ 320.7	$ (9.5)	$ 257.4

[1] "Federal" reflects U.K. income (loss) before income taxes.
[2] "International" reflects non-U.K. income (loss) before income taxes.

The provision for income taxes consisted of the following:

In millions	Years ended December 31 2021	2020	2019
Currently payable			
International [1]	66.2	51.8	55.6
Total current taxes	66.2	51.8	55.6
Deferred			
Federal [2]	$ 0.1	$ 0.2	$ —
International [1]	(18.5)	(14.3)	(20.9)
Total deferred taxes	(18.4)	(14.1)	(20.9)
Total provision for income taxes	$ 47.8	$ 37.7	$ 34.7

[1] "International" represents non-U.K. taxes.
[2] "Federal" represents U.K. taxes.

Reconciliations of the federal statutory income tax rate to our effective tax rate were as follows:

Percentages	Years ended December 31 2021	2020	2019
Federal statutory income tax rate [1]	19.0 %	19.0 %	19.0 %
Tax effect of international operations [2]	(6.7)	153.1	(2.2)
Change in valuation allowances	2.1	(308.0)	(3.6)
Withholding taxes	0.7	(14.3)	0.4
Excess tax benefits on stock-based compensation	(0.2)	1.2	(0.1)
Tax effect of goodwill impairment	—	(247.8)	—
Effective tax rate [3]	14.9 %	(396.8 %)	13.5 %

[1] The statutory rate for 2021, 2020 and 2019 reflects the U.K. statutory rate of 19.0%.
[2] The tax effect of international operations consists of non-U.K. jurisdictions.
[3] The Company's effective tax rate for the period ended December 31, 2020 is negative due to the loss before income taxes, resulting primarily from the impairment of goodwill, compared to the net tax expense recorded for the period.

Reconciliations of the beginning and ending gross unrecognized tax benefits were as follows:

	Years ended December 31		
In millions	2021	2020	2019
Beginning balance	$ 17.1	$ 17.0	$ 16.8
Gross increases for tax positions in prior periods	0.5	0.3	0.3
Gross decreases for tax positions in prior periods	(0.9)	(1.4)	(1.3)
Gross increases based on tax positions related to the current year	1.1	1.1	1.8
Gross decreases related to settlements with taxing authorities	(1.4)	(2.5)	(0.2)
Reductions due to statute expiration	(0.3)	(0.5)	(0.1)
Gross increases (decreases) due to currency fluctuations	(0.5)	0.3	(0.3)
Gross increases due to acquisitions	—	2.8	—
Ending balance	$ 15.6	$ 17.1	$ 17.0

We record gross unrecognized tax benefits in *Other current liabilities* and *Other non-current liabilities* in the Consolidated Balance Sheets. Included in the $15.6 million of total gross unrecognized tax benefits as of December 31, 2021 was $14.3 million of tax benefits that, if recognized, would impact the effective tax rate. It is reasonably possible that the gross unrecognized tax benefits as of December 31, 2021 may decrease by a range of zero to $1.6 million during 2022, primarily as a result of the resolution of non-U.K. examinations and the expiration of various statutes of limitations.

Based on the outcome of tax examinations, or as a result of the expiration of statute of limitations for specific jurisdictions, it is reasonably possible that certain unrecognized tax benefits for tax positions taken on previously filed tax returns will materially change from those recorded as liabilities in our financial statements. A number of tax periods from 2014 to present are under audit by tax authorities in various jurisdictions, including Canada, France, India, and Germany and certain U.S. states. Certain nVent entities are currently subject to IRS audit in the U.S. for 2018 tax periods prior to the separation. We anticipate that several of these audits may be concluded in the foreseeable future.

We record penalties and interest related to unrecognized tax benefits in *Provision for income taxes* and *Net interest expense*, respectively, in the Consolidated Statements of Operations and Comprehensive Income (Loss). As of December 31, 2021 and 2020, we have liabilities of $2.1 million and $2.3 million, respectively, for the possible payment of penalties and $2.9 million and $3.5 million, respectively, for the possible payment of interest expense, which are recorded in *Other current liabilities* in the Consolidated Balance Sheets.

For 2021, we consider substantially all foreign earnings to be indefinitely reinvested. These earnings relate to ongoing operations and have been reinvested in active business operations. It is not practicable to estimate the amount of tax that might be payable if such earnings were to be remitted. Deferred taxes, if necessary, have been provided on earnings of non-U.S. affiliates whose earnings are not indefinitely reinvested.

Deferred taxes arise because of different treatment between financial statement accounting and tax accounting, known as "temporary differences." We record the tax effect of these temporary differences as "deferred tax assets" (generally items that can be used as a tax deduction or credit in future periods) and "deferred tax liabilities" (generally items for which we received a tax deduction but the tax impact has not yet been recorded in the Consolidated Statements of Operations and Comprehensive Income (Loss)).

Deferred taxes were recorded in the Consolidated Balance Sheets at December 31 as follows:

In millions	2021	2020
Other non-current assets	$ 14.6	$ 29.8
Deferred tax liabilities	210.3	230.1
Net deferred tax liabilities	$ 195.7	$ 200.3

The tax effects of the major items recorded as deferred tax assets and liabilities at December 31 were as follows:

In millions	2021	2020
Deferred tax assets		
Accrued liabilities and reserves	$ 13.8	$ 8.5
Pension and other post-retirement compensation and benefits	36.1	41.4
Employee compensation and benefits	22.1	16.1
Tax loss and credit carryforwards	128.2	137.8
Interest limitation	23.9	15.8
Other assets	13.9	10.1
Total deferred tax assets	238.0	229.7
Valuation allowance	147.6	154.5
Deferred tax assets, net of valuation allowance	90.4	75.2
Deferred tax liabilities		
Property, plant and equipment	17.6	17.1
Goodwill and other intangibles	246.1	240.2
Other liabilities	22.4	18.2
Total deferred tax liabilities	286.1	275.5
Net deferred tax liabilities	$ 195.7	$ 200.3

Included in tax loss and credit carryforwards in the table above is a deferred tax asset of $3.1 million as of December 31, 2021 related to foreign tax credit carryover from the tax period ended December 31, 2017 and related to transition taxes. The entire amount is subject to a valuation allowance. The foreign tax credit is eligible for carryforward until the tax period ending December 31, 2027.

As of December 31, 2021, tax loss carryforwards of $471.7 million were available to offset future income. A valuation allowance of $114.3 million exists for deferred income tax benefits related to the tax loss carryforwards which may not be realized. We believe sufficient taxable income will be generated in the respective jurisdictions to allow us to fully recover the remainder of the tax losses. The tax losses relate to non-U.S. carryforwards which are subject to varying expiration periods. Non-U.S. carryforwards of $381.0 million are located in jurisdictions with unlimited tax loss carryforward periods, while the remainder will begin to expire in 2022.

12. Benefit Plans

Pension and other post-retirement plans
We sponsor U.S. and non-U.S. defined-benefit pension and other post-retirement plans. The defined benefit pension plans cover certain non-U.S. employees and retirees, and the pension benefits are based principally on an employee's years of service and/or compensation levels near retirement. In addition, we provide certain post-retirement health care and life insurance benefits. Generally, the post-retirement health care and life insurance plans require contributions from retirees.

Obligations and funded status

The following tables present reconciliations of plan benefit obligations, fair value of plan assets and the funded status of pension plans and other post-retirement plans as of and for the years ended December 31, 2021 and 2020:

	Pension plans		Post-retirement health plan	
In millions	**2021**	**2020**	**2021**	**2020**
Change in benefit obligations				
Benefit obligation beginning of year	$ 241.4	$ 210.8	$ 18.5	$ 17.3
Service cost	3.2	6.7	0.1	0.1
Interest cost	2.8	3.5	0.4	0.5
Plan settlements	—	(0.2)	—	—
Actuarial loss (gain)	(12.5)	11.0	(1.2)	1.6
Foreign currency translation	(16.4)	20.6	—	—
Benefits paid	(5.1)	(6.8)	(0.9)	(1.0)
Plan curtailment gain	—	(4.2)	—	—
Benefit obligation end of year	$ 213.4	$ 241.4	$ 16.9	$ 18.5
Change in plan assets				
Fair value of plan assets beginning of year	$ 31.2	$ 28.7	$ —	$ —
Actual return on plan assets	2.4	1.9	—	—
Company contributions	5.6	5.7	0.9	1.1
Plan settlements	—	(0.3)	—	—
Foreign currency translation	(1.0)	2.0	—	—
Benefits paid	(5.1)	(6.8)	(0.9)	(1.1)
Fair value of plan assets end of year	$ 33.1	$ 31.2	$ —	$ —
Funded status				
Fair value of plan assets end of year	$ 33.1	$ 31.2	$ —	$ —
Benefit obligation end of year	213.4	241.4	16.9	18.5
Benefit obligations in excess of the fair value of plan assets	$ (180.3)	$ (210.2)	$ (16.9)	$ (18.5)

In 2020, we amended a defined benefit pension plan in Germany, which triggered a curtailment and required a remeasurement of the benefit obligation. The remeasurement resulted in a curtailment gain (decrease in the benefit obligation) of $4.2 million, which is reflected in *Other expense* in the Consolidated Statements of Operations and Comprehensive Income (Loss).

The actuarial gain during 2021 is primarily attributable to the increase in discount rates from 2020.

Amounts recorded in the Consolidated Balance Sheets at December 31 were as follows:

	Pension plans		Post-retirement health plan	
In millions	**2021**	**2020**	**2021**	**2020**
Other non-current assets	$ 4.2	$ 2.1	$ —	$ —
Current liabilities	(4.2)	(4.3)	—	(1.2)
Non-current liabilities	(180.3)	(208.0)	(16.9)	(17.3)
Benefit obligations in excess of the fair value of plan assets	$ (180.3)	$ (210.2)	$ (16.9)	$ (18.5)

The accumulated benefit obligation for all defined benefit plans was $208.5 million and $234.9 million at December 31, 2021 and 2020, respectively.

Information for pension plans with an accumulated benefit obligation or projected benefit obligation in excess of plan assets as of December 31 was as follows:

	Projected benefit obligation exceeds the fair value of plan assets		Accumulated benefit obligation exceeds the fair value of plan assets	
In millions	**2021**	**2020**	**2021**	**2020**
Projected benefit obligation	$ 200.4	$ 227.7	$ 199.3	$ 227.7
Fair value of plan assets	15.9	15.3	14.9	15.3
Accumulated benefit obligation	N/A	N/A	194.6	221.2

Components of net periodic benefit expense for our pension plans were as follow for the years ended December 31:

In millions	**2021**	**2020**	**2019**
Service cost	$ 3.2	$ 6.7	$ 5.9
Interest cost	2.8	3.5	4.0
Expected return on plan assets	(1.1)	(1.3)	(1.1)
Net actuarial loss (gain)	(13.7)	10.3	25.4
Plan curtailment gain	—	(4.2)	—
Net periodic benefit expense (income)	$ (8.8)	$ 15.0	$ 34.2

Components of net periodic benefit expense for our post-retirement plan for the years ended December 31, 2021, 2020 and 2019, were not material.

Assumptions

Weighted-average assumptions used to determine benefit obligations as of December 31 were as follows:

	Pension plans			Post-retirement health plan		
Percentages	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**
Discount rate	1.55 %	1.26 %	1.54 %	2.65 %	2.17 %	3.08 %
Rate of compensation increase	2.96 %	2.96 %	2.97 %	— %	— %	— %

Weighted-average assumptions used to determine net periodic benefit expense for years ended December 31 were as follows:

	Pension plans			Post-retirement health plan		
Percentages	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**
Discount rate	1.26 %	1.54 %	2.25 %	2.17 %	3.08 %	4.10 %
Expected long-term return on plan assets	3.64 %	3.91 %	4.15 %	— %	— %	— %
Rate of compensation increase	2.96 %	2.97 %	2.97 %	— %	— %	— %

Uncertainty in the securities markets and U.S. economy could result in investment returns less than those assumed. Should the securities markets decline or medical and prescription drug costs increase at a rate greater than assumed, we would expect increasing annual combined net pension and other post-retirement costs for the next several years. Should actual experience differ from actuarial assumptions, the projected pension benefit obligation and net pension cost and accumulated other post-retirement benefit obligation and other post-retirement benefit cost would be affected in future years.

Discount rates

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our December 31 measurement date. The discount rates on our pension plans ranged from 0.25% to 3.25%, 0.00% to 2.75% and 0.25% to 3.25% in 2021, 2020 and 2019, respectively. The discount rates are determined by matching high-quality, fixed-income debt instruments with maturities corresponding to the expected timing of benefit payments as of the annual measurement date for each of the various plans. There are no known or anticipated changes in our discount rate assumptions that will materially impact our pension expense in 2022.

Expected rates of return
The expected rates of return on our pension plan assets ranged from 1.00% to 4.50%, 1.00% to 5.00% and 1.00% to 5.25% in 2021, 2020 and 2019, respectively. The expected rate of return is designed to be a long-term assumption that may be subject to considerable year-to-year variance from actual returns. In developing the expected long-term rate of return, we considered our historical returns, with consideration given to forecasted economic conditions, our asset allocations, input from external consultants and broader longer-term market indices. Any difference in the expected rate and actual returns will be included with the actuarial gain or loss recorded in the fourth quarter when our plans are remeasured.

Pension plans assets
Objective
The primary objective of our investment strategy is to meet the pension obligation to our employees at a reasonable cost to us. This is primarily accomplished through growth of capital and safety of the funds invested.

Asset allocation
The majority of our pension plan assets are invested in fixed income and equity securities which is consistent with our investment policy goals. Actual investments for our pension plans as of December 31 were as follows:

	Actual	
Percentages	**2021**	**2020**
Equity securities	47 %	43 %
Fixed income	38 %	41 %
Alternative investments	12 %	12 %
Cash equivalents	3 %	4 %

Fair value measurement
The fair values of our pension plan assets as of December 31 were as follows:

In millions	**2021**	**2020**
Cash equivalents	$ 1.0	$ 1.3
Fixed income:		
Corporate and Non U.S. government	12.5	12.7
Other investments (alternative investments)	4.1	3.8
Total investments at fair value	$ 17.6	$ 17.8
Investments measured at net asset value (equity securities)	15.5	13.4
Total	$ 33.1	$ 31.2

Valuation methodologies used for investments measured at fair value, each of which is classified as Level 2 in the fair value hierarchy, were as follows:

- *cash equivalents* — Cash equivalents consist of investments in commingled funds valued based on observable market data.
- *fixed income* — Investments in corporate bonds, government securities, mortgages and asset backed securities were valued based upon quoted market prices for similar securities and other observable market data. Investments in commingled funds were generally valued at the net asset value of units held at the end of the period based upon the value of the underlying investments as determined by quoted market prices or by a pricing service.
- *other investments* — Other investments include investments in commingled funds with diversified investment strategies. Investments in commingled funds were valued at the net asset value of units held at the end of the period based upon the value of the underlying investments as determined by quoted market prices or by a pricing service.

Cash flows
Contributions
Pension and post-retirement plan contributions totaled $6.5 million and $6.8 million in 2021 and 2020, respectively. The 2022 expected contributions will equal or exceed our minimum funding requirements of $6.9 million.

Estimated future benefit payments
The following benefit payments, which reflect expected future service or payout from termination, as appropriate, are expected to be paid by the plans in each of the next five fiscal years and in the aggregate for the five fiscal years thereafter are as follows:

In millions	**Pension plans**	**Post-retirement health plan**
2022	$ 5.4	$ 1.2
2023	5.4	1.2
2024	5.9	1.2
2025	7.2	1.1
2026	6.5	1.1
2027-2031	41.3	4.9

Savings plan
nVent is the plan sponsor of a 401(k) retirement plan (nVent Management Company Retirement Savings and Incentive Plan or "401(k) plan") and employee share ownership plan (nVent Electric plc Employee Stock Purchase and Bonus Plan). The 401(k) plan covers certain union and all non-union U.S. employees who met certain age requirements. Under the 401(k) plan, eligible U.S. employees could voluntarily contribute a percentage of their eligible compensation and we match contributions made by employees who met certain eligibility and service requirements. During 2019 and the first half of 2020, the matching contribution was 100% of eligible employee contributions for the first 5% of eligible contributions contributed as pre-tax contribution. In response to the adverse effects of the COVID-19 pandemic, effective July 1, 2020, the employer matching contributions were reduced to 50% of the first 5% of eligible compensation contributed as pre-tax contribution. On January 1, 2021, the Company increased the employer matching contributions to 60% of the first 5% of eligible compensation, and on July 1, 2021, the Company increased the employer matching contributions back to 100% of the first 5% of eligible compensation. Expense for the 401(k) plan was $8.6 million, $8.8 million, and $10.9 million in 2021, 2020, and 2019, respectively.

13. Shareholders' Equity

Authorized shares
Our authorized share capital consists of 400.0 million ordinary shares with a par value of $0.01 per share.

Share repurchases
On July 23, 2018, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $500.0 million (the "2018 Authorization"). On February 19, 2019, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $380.0 million (the "2019 Authorization"). The 2018 Authorization and the 2019 Authorization expired on July 23, 2021.

On May 14, 2021, the Board of Directors authorized the repurchase of our ordinary shares up to a maximum dollar limit of $300.0 million (the "2021 Authorization"). The 2021 Authorization began on July 23, 2021 upon expiration of the 2018 Authorization and the 2019 Authorization, and expires on July 22, 2024.

During the year ended December 31, 2021, we repurchased 3.5 million of our ordinary shares for $116.1 million under the 2018 Authorization and the 2021 Authorization. During the year ended December 31, 2020, we repurchased 2.3 million of our ordinary shares for $43.2 million under the 2018 Authorization. As of December 31, 2021 and 2020, outstanding share repurchases recorded in *Other current liabilities* were $4.6 million and zero, respectively.

As of December 31, 2021, we had $203.9 million available for repurchases under the 2021 Authorization.

Dividends
Dividends paid per ordinary share were $0.70 for both the years ended December 31, 2021 and 2020.

On December 13, 2021, the Board of Directors declared a quarterly cash dividend of $0.175 that was paid on February 4, 2022 to shareholders of record at the close of business on January 21, 2022. The balance of dividends payable included in *Other current liabilities* on our Consolidated Balance Sheets was $30.5 million and $29.4 million at December 31, 2021 and 2020, respectively.

On February 21, 2022, the Board of Directors declared a quarterly cash dividend of $0.175 per ordinary share payable on May 6, 2022 to shareholders of record at the close of business on April 22, 2022.

14. Segment Information

We classify our operations into the following business segments based primarily on types of products offered and markets served:

- *Enclosures* — The Enclosures segment provides innovative solutions to connect, protect, power and cool critical controls systems, electronics, data and electrical equipment. From metallic and non-metallic enclosures to cabinets, subracks and backplanes, it offers the physical infrastructure to host, connect and protect server and network equipment, as well as indoor and outdoor protection for test and measurement and aerospace and defense applications in industrial, infrastructure, commercial and energy verticals.

- *Electrical & Fastening Solutions* — The Electrical & Fastening Solutions segment provides solutions that connect and protect electrical and mechanical systems and civil structures. Its engineered electrical and fastening products are innovative cost efficient and time saving connections that are used across a wide range of verticals, including commercial, industrial, infrastructure and energy.

- *Thermal Management* — The Thermal Management segment provides electric thermal solutions that connect and protect critical buildings, infrastructure, industrial processes and people. Its thermal management systems include heat tracing, floor heating, fire-rated and specialty wiring, sensing and snow melting and de-icing solutions for use in industrial, commercial & residential, energy and infrastructure verticals. It's highly reliable and easy to install solutions lower total cost of ownership to building owners, facility managers, operators and end users.

- *Other* — Other is primarily composed of unallocated corporate expenses, our captive insurance subsidiary and intermediate finance companies.

The accounting policies of our reporting segments are the same as those described in the summary of significant accounting policies. We evaluate performance based on the net sales and segment income (loss) and use a variety of ratios to measure performance of our reporting segments. These results are not necessarily indicative of the results of operations that would have occurred had each segment been an independent, stand-alone entity during the periods presented. Segment income (loss) represents operating income exclusive of intangible amortization, separation costs, costs of restructuring activities, "mark-to-market" gain/loss for pension and other post-retirement plans, impairments and other unusual non-operating items.

Financial information by reportable segment is included in the following summary:

	Net sales			Segment income (loss)		
In millions	2021	2020	2019	2021	2020	2019
Enclosures	$ 1,244.8	$ 952.9	$ 1,033.8	$ 202.1	$ 148.5	$ 181.3
Electrical & Fastening Solutions	657.5	569.1	579.6	181.5	150.2	149.7
Thermal Management	559.7	476.6	590.6	121.2	93.9	145.3
Other	—	—	—	(69.0)	(45.0)	(52.0)
Consolidated	$ 2,462.0	$ 1,998.6	$ 2,204.0	$ 435.8	$ 347.6	$ 424.3

No customer accounted for more than 10% of net sales in 2021, 2020 or 2019.

	Identifiable assets			Depreciation		
In millions	2021	2020	2019	2021	2020	2019
Enclosures	$ 1,192.9	$ 785.9	$ 787.0	$ 19.4	$ 18.4	$ 16.1
Electrical & Fastening Solutions	2,121.6	2,111.8	2,129.3	10.1	10.2	9.1
Thermal Management	1,275.3	1,271.3	1,543.7	7.2	7.0	7.9
Other	84.4	197.1	180.3	4.2	2.8	2.3
Consolidated	$ 4,674.2	$ 4,366.1	$ 4,640.3	$ 40.9	$ 38.4	$ 35.4

	Capital expenditures		
In millions	2021	2020	2019
Enclosures	$ 18.3	$ 17.7	$ 15.3
Electrical & Fastening Solutions	11.6	10.7	13.3
Thermal Management	5.3	6.2	6.8
Other	4.3	5.4	3.4
Consolidated	$ 39.5	$ 40.0	$ 38.8

The following table presents a reconciliation of consolidated segment income to consolidated income (loss) before income taxes for the years ended December 31:

In millions	2021	2020	2019
Segment income	$ 435.8	$ 347.6	$ 424.3
Impairment of goodwill	—	(212.3)	—
Impairment of trade names	—	(8.2)	—
Loss on early extinguishment of debt	(15.2)	—	—
Restructuring and other	(8.8)	(22.0)	(24.2)
Intangible amortization	(67.5)	(64.2)	(61.4)
Pension and other post-retirement mark-to-market gain (loss)	15.1	(8.7)	(27.3)
Acquisition transaction and integration costs	(4.1)	(2.5)	(2.4)
Inventory step-up amortization	—	—	(3.2)
Interest expense, net	(32.3)	(36.4)	(44.7)
Other expense	(2.3)	(2.8)	(3.7)
Income (loss) before income taxes	$ 320.7	$ (9.5)	$ 257.4

15. Leases

We have operating leases for office space, production facilities, distribution centers, warehouses, sales offices, fleet vehicles and equipment. In accordance with our accounting policy, leases with an initial term of 12 months or less are not recognized on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term. We elected the practical expedient for all leases to include both lease and non-lease components within our lease assets and lease liabilities.

Our lease agreements do not contain any material residual value guarantees, any material bargain purchase options or material restrictive covenants. We have no material sublease arrangements with third parties or lease transactions with related parties.

During the years ended December 31, 2021, 2020 and 2019, rent expense was $19.9 million, $20.3 million, and $19.8 million, respectively, primarily related to operating lease costs. Costs associated with short-term leases, variable rent and subleases were immaterial.

Our leases have remaining lease terms of one to ten years, some of which include options to extend the leases for up to five years. Renewal options that are reasonably certain to be exercised are included in the lease term. The incremental borrowing rate is used in determining the present value of lease payments, unless an implicit rate is specified. Incremental borrowing rates on a collateralized basis are determined based on the economic environment in which leases are denominated and the lease term. The weighted average remaining lease term and weighted average discount rate were as follows:

	December 31, 2021	**December 31, 2020**
Weighted average remaining lease term		
Operating leases	6 years	5 years
Weighted average discount rate		
Operating leases	4.0 %	3.5 %

Future lease payments under non-cancelable operating leases as of December 31, 2021 were as follows:

In millions		
2022	$	20.8
2023		17.1
2024		14.3
2025		12.3
2026		11.1
Thereafter		21.5
Total lease payments		97.1
Less imputed interest		(13.2)
Total reported lease liability	$	83.9

Supplemental cash flow information related to operating leases was as follows:

	Year ended December 31	
In millions	**2021**	**2020**
Cash paid for amounts included in the measurement of lease liabilities	$ 22.1	$ 17.4
Lease right-of-use assets obtained in exchange for new lease liabilities	49.3	16.2

Supplemental balance sheet information related to operating leases as of December 31 was as follows:

In millions	Classification	2021	2020
Assets			
Lease right-of-use assets	Other non-current assets	$ 79.1	$ 45.6
Liabilities			
Current lease liabilities	Other current liabilities	$ 17.4	$ 14.2
Non-current lease liabilities	Other non-current liabilities	66.5	35.7
Total lease liabilities		$ 83.9	$ 49.9

16. Commitments and Contingencies

Warranties and guarantees
In connection with the disposition of our businesses or product lines, we may agree to indemnify purchasers for various potential liabilities relating to the sold business, such as pre-closing tax, product liability, warranty, environmental, or other obligations. The subject matter, amounts and duration of any such indemnification obligations vary for each type of liability indemnified and may vary widely from transaction to transaction.

Generally, the maximum obligation under such indemnifications is not explicitly stated and as a result, the overall amount of these obligations cannot be reasonably estimated. Historically, we have not made significant payments for these indemnifications. We believe that if we were to incur a loss in any of these matters, the loss would not have a material effect on our financial position, results of operations or cash flows. We recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee.

We provide service and warranty policies on our products. Liability under service and warranty policies is based upon a review of historical warranty and service claim experience. Adjustments are made to accruals as claim data and historical experience warrant. Our liability for service and product warranties as of December 31, 2021 and 2020 was not material.

Stand-by letters of credit, bank guarantees and bonds
In the ordinary course of business, we are required to commit to bonds, letters of credit and bank guarantees that require payments to our customers for any non-performance. The outstanding face value of these instruments fluctuates with the value of our projects in process and in our backlog. In addition, we issue financial stand-by letters of credit primarily to secure our performance to third parties under self-insurance programs.

As of December 31, 2021 and 2020, the outstanding value of bonds, letters of credit and bank guarantees totaled $38.2 million and $43.8 million, respectively.

Other matters
We are subject to disputes, administrative proceedings and other claims arising out of the normal conduct of our business. These matters generally relate to disputes arising out of the use or installation of our products, product liability litigation, personal injury claims, commercial and contract disputes and employment related matters. On the basis of information currently available, management does not believe that existing proceedings and claims will have a material impact on our consolidated financial statements. However, litigation is unpredictable, and we could incur judgments or enter into settlements for current or future claims that could adversely affect our financial statements.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the year ended December 31, 2021, pursuant to Rule 13a-15(b) of the Securities Exchange Act of 1934 ("the Exchange Act"). Based upon their evaluation, our Chief Executive Officer and our Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the year ended December 31, 2021 to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms and to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosures.

Management's Annual Report on Internal Control Over Financial Reporting
The report of management required under this ITEM 9A is contained in ITEM 8 of this Annual Report on Form 10-K under the caption "Management's Report on Internal Control Over Financial Reporting."

Attestation Report of Independent Registered Public Accounting Firm
The attestation report required under this ITEM 9A is contained in ITEM 8 of this Annual Report on Form 10-K under the caption "Report of Independent Registered Public Accounting Firm."

Changes in Internal Control over Financial Reporting
There was no change in our internal control over financial reporting that occurred during the quarter ended December 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required under this item with respect to directors is contained in our Proxy Statement for our 2022 annual general meeting of shareholders under the captions "Proposal 1 Elect Director Nominees" and "Corporate Governance Matters," and is incorporated herein by reference.

Information required under this item with respect to executive officers is contained in Part I of this Form 10-K under the caption "Information About Our Executive Officers."

Our Board of Directors adopted nVent's Code of Business Conduct and Ethics and designated it as the code of ethics for the Company's Chief Executive Officer and senior financial officers. The Code of Business Conduct and Ethics also applies to all employees and directors in accordance with New York Stock Exchange Listing Standards. We have posted a copy of nVent's Code of Business Conduct and Ethics on our website at https://investors.nvent.com/corporate-governance/. We intend to satisfy the disclosure requirements under Item 5.05 of Form 8-K regarding amendments to or waivers from, nVent's Code of Business Conduct and Ethics by posting such information on our website at https://investors.nvent.com/corporate-governance/.

We are not including the information contained on our website as part of, or incorporating it by reference into, this report.

ITEM 11. EXECUTIVE COMPENSATION

Information required under this item is contained in our Proxy Statement for our 2022 annual general meeting of shareholders under the captions "Corporate Governance Matters - Director Compensation," "Compensation and Human Capital Committee Report," "Compensation Discussion and Analysis," and "Executive Compensation Tables" and is incorporated herein by reference.

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

Information required under this item with respect to security ownership is contained in our Proxy Statement for our 2022 annual general meeting of shareholders under the caption "Security Ownership" and is incorporated herein by reference.

The following table summarizes, as of December 31, 2021, information about compensation plans under which our equity securities are authorized for issuance:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders:			
2018 Omnibus Incentive Plan	5,776,053 [1]	$ 25.00 [2]	13,155,453 [3]
Total	5,776,053	$ 25.00	13,155,453

(1) Consists of 3,495,440 shares subject to stock options, 1,414,721 shares subject to restricted stock units and 865,892 shares subject to performance share awards.

(2) Represents the weighted average exercise price of outstanding stock options and does not take into account outstanding restricted stock units or performance share units.

(3) Represents securities remaining available for issuance under the 2018 Omnibus Incentive Plan.

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

Information required under this item is contained in our Proxy Statement for our 2022 annual general meeting of shareholders under the captions "Proposal 1 Re-elect Director Nominees - Director Independence" and "Corporate Governance Matters - The Board's Role and Responsibilities - Policies and Procedures Regarding Related Person Transactions" and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information required under this item is contained in our Proxy Statement for our 2022 annual general meeting of shareholders under the caption "Proposal 4 Ratify, by Non-Binding Advisory Vote, the Appointment of Deloitte & Touche LLP as the Independent Auditor of nVent Electric plc and to Authorize, by Binding Vote, the Audit and Finance Committee of the Board of Directors to Set the Auditor's Remuneration" and is incorporated herein by reference. Deloitte & Touche LLP (PCAOB ID no. 34) is our principal accountant.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following information required under this item is filed as part of this report:

(1) Financial Statements

Consolidated Financial Statements filed as part of this report are listed under Part II, ITEM 8 of this Form 10-K.

Financial Statement Schedules

None.

All other schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission have been omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

(2) Exhibits

The exhibits of this Annual Report on Form 10-K included herein are set forth below.

Exhibit Number	Exhibit
3.1	Amended and Restated Memorandum and Articles of Association of nVent Electric plc (incorporated by reference to Exhibit 4.1 to Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 of nVent Electric plc filed with the Commission on December 31, 2018 (File No. 333-224555)).
4.1	Indenture, dated as of March 26, 2018, among nVent Finance S.à r.l, nVent Electric plc, Pentair plc, Pentair Investments Switzerland GmbH and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to Amendment No. 4 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on March 26, 2018 (File No. 001-38265)).
4.2	Second Supplemental Indenture, dated as of March 26, 2018, among nVent Finance S.à r.l, nVent Electric plc, Pentair plc, Pentair Investments Switzerland GmbH and U.S. Bank National Association (incorporated by reference to Exhibit 4.3 to Amendment No. 4 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on March 26, 2018 (File No. 001-38265)).
4.3	Third Supplemental Indenture, dated as of April 30, 2018, among nVent Finance S.à r.l, nVent Electric plc and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on April 30, 2018 (File No. 001-38265)).
4.4	Fourth Supplemental Indenture, dated as of November 23, 2021, among nVent Finance S.à r.l, nVent Electric plc and U.S. Bank National Association (incorporated by reference to Exhibit 4.3 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on November 23, 2021 (File No. 001-38265)).
4.5	Amended and Restated Credit Agreement, dated as of September 24, 2021, among nVent Electric plc, nVent Finance S.à r.l., Hoffman Schroff Holdings, Inc., the other affiliate borrowers from time to time party thereto and the lenders and agents party thereto (incorporated by reference to Exhibit 4.1 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on September 30, 2021 (File No. 001-38265)).
4.6	Description of Securities (incorporated by reference to Exhibit 4.7 in the Annual Report on Form 10-K of nVent Electric plc filed with the Commission on February 25, 2020 (File No. 001-38265)).
10.1	nVent Electric plc 2018 Omnibus Incentive Plan (incorporated by reference to Appendix B to the Definitive Proxy Statement on Schedule 14A of nVent Electric plc filed with the Commission on March 31, 2020 (File No. 001-38265)).*
10.2	Form of Executive Officer Stock Option Award Agreement (incorporated by reference to Exhibit 10.2 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on May 8, 2018 (File No. 001-38265)).*
10.3	Form of Executive Officer Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.3 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on May 8, 2018 (File No. 001-38265)).*
10.4	Form of Executive Officer Performance Stock Unit Award Agreement (incorporated by reference to Exhibit 10.4 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on May 8, 2018 (File No. 001-38265)).*

10.5	Description of nVent Electric plc Management Incentive Plan (incorporated by reference to Exhibit 10.5 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on July 31, 2020 (File No. 001-38265)).*
10.6	Form of Non-Employee Director Restricted Stock Unit Award Agreement.*
10.7	Form of Key Executive Employment and Severance Agreement for Beth A. Wozniak, Michael B. Faulconer, Lynnette R. Heath, Jon D. Lammers, Aravind Padmanabhan, Joseph A. Ruzynski, Randolph A. Wacker, and Sara E. Zawoyski (incorporated by reference to Exhibit 10.6 to Amendment No. 2 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on January 31, 2018 (File No. 001-38265)).*
10.8	nVent Electric plc Employee Stock Purchase and Bonus Plan, as amended and restated January 1, 2021 (incorporated by reference to Exhibit 10.8 in the Annual Report on Form 10-K of nVent Electric plc filed with the Commission on February 23, 2021 (File No. 001-38265)).*
10.9	nVent Management Company Non-Qualified Deferred Compensation Plan (incorporated by reference to Exhibit 10.4 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on April 30, 2018 (File No. 001-38265)).*
10.10	nVent Electric plc Compensation Plan for Non-Employee Directors (incorporated by reference to Exhibit 10.10 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on May 8, 2018 (File No. 001-38265)).*
10.11	nVent Management Company Supplemental Executive Retirement Plan (incorporated by reference to Exhibit 10.5 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on April 30, 2018 (File No. 001-38265)).*
10.12	Flow Control Supplemental Savings and Retirement Plan (incorporated by reference to Exhibit 10.12 to Amendment No. 2 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on January 31, 2018 (File No. 001-38265)).*
10.13	Form of Deed of Indemnification for directors and executive officers of nVent Electric plc (incorporated by reference to Exhibit 10.4 to Amendment No. 2 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on January 31, 2018 (File No. 001-38265)).*
10.14	Form of Indemnification Agreement for directors and executive officers of nVent Electric plc (incorporated by reference to Exhibit 10.5 to Amendment No. 2 to the Registration Statement on Form 10 of nVent Electric plc filed with the Commission on January 31, 2018 (File No. 001-38265)).*
10.15	Form of Key Executive Employment and Severance Agreement for Robert J. van der Kolk (incorporated by reference to Exhibit 10.15 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on July 26, 2018 (File No. 001-38625)).*
10.16	Tax Matters Agreement, dated as of April 27, 2018, by and between Pentair plc and nVent Electric plc (incorporated by reference to Exhibit 2.2 in the Current Report on Form 8-K of nVent Electric plc filed with the Commission on April 30, 2018 (File No. 001-38265)).
10.17	Description of Amendment to the nVent Management Company Non-Qualified Deferred Compensation Plan (incorporated by reference to Exhibit 10.9 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on July 31, 2020 (File No. 001-38265)).*
10.18	nVent Electric plc Non-Employee Director Compensation Policy.*
10.19	nVent Management Company Severance Plan for Executives effective March 1, 2019, as amended effective December 9, 2019 (incorporated by reference to Exhibit 10.19 in the Annual Report on Form 10-K of nVent Electric plc filed with the Commission on February 25, 2020 (File No. 001-38265)).*
10.20	Form of Executive Officer Performance Stock Unit Award Agreement with Stock Price Vesting (incorporated by reference to Exhibit 10.1 in the Quarterly Report on Form 10-Q of nVent Electric plc filed with the Commission on April 29, 2021 (File No. 001-38265)).*
21	List of nVent Electric plc subsidiaries.
22	Guarantors and Subsidiary Issuers of Guaranteed Securities.
23	Consent of Independent Registered Public Accounting Firm — Deloitte & Touche LLP.
24	Power of attorney.
31.1	Certification of Chief Executive Officer.
31.2	Certification of Chief Financial Officer.

32.1	Certification of Chief Executive Officer, 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 Chief Financial Officer, Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from nVent Electric plc's Annual Report on Form 10-K for the year ended December 31, 2020 are filed herewith, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended December 31, 2021, 2020 and 2019, (ii) the Consolidated Balance Sheets as of December 31, 2021 and 2020, (iii) the Consolidated Statements of Cash Flows for the years ended December 31, 2021, 2020 and 2019, (iv) the Consolidated Statements of Changes in Equity for the years ended December 31, 2021, 2020 and 2019 and (v) the Notes to the Consolidated Financial Statements.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).

* Denotes a management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

None.

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, on February 25, 2022.

NVENT ELECTRIC PLC

By /s/ Sara E. Zawoyski
Sara E. Zawoyski
Executive Vice President and Chief Financial 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 February 25, 2022.

Signature	Title
/s/ Beth A. Wozniak Beth A. Wozniak	Chief Executive Officer and Director
/s/ Sara E. Zawoyski Sara E. Zawoyski	Executive Vice President and Chief Financial Officer
/s/ Randolph A. Wacker Randolph A. Wacker	Senior Vice President, Chief Accounting Officer and Treasurer
* Jerry W. Burris	Director
* Susan M. Cameron	Director
* Michael L. Ducker	Director
* Randall J. Hogan	Director
* Ronald L. Merriman	Director
* Nicola Palmer	Director
* Herbert K. Parker	Director
* Greg Scheu	Director
* Jacqueline Wright	Director

*By /s/ Jon D. Lammers
Jon D. Lammers
Attorney-in-fact