Risk Factors Comparison 2024-02-12 to 2023-02-14 Form: 10-K

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Shareholders, potential investors and other readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on such forward- looking statements. The forward- looking statements made herein are made only as of the date of this annual report and we undertake no obligation to publicly update any forward- looking statements, whether as a result of new information, future events or otherwise. PART I ITEM 1. Business OVERVIEW We were founded in 1919 as Cummins Engine Company, a corporation in Columbus, Indiana **,** and one of the first diesel engine manufacturers. In 2001, we changed our name to Cummins Inc. We are a global power leader that designs, manufactures, distributes and services diesel, natural gas, electric and hybrid powertrains and powertrain- related components including filtration, aftertreatment, turbochargers, fuel systems, **valvetrain technologies,** controls systems, air handling systems, automated transmissions, axles, drivelines, brakes, suspension systems, electric power generation systems, batteries, electrified power systems, ~~electric powertrains,~~ hydrogen production **technologies** and fuel cell products. We sell our products to original equipment manufacturers (OEMs), distributors, dealers and other customers worldwide. We serve our customers through a service network of approximately ~~460~~ **450** wholly- owned, joint venture and independent distributor locations and more than ~~10~~ **19** , 000 Cummins certified dealer locations in approximately 190 countries and territories. Meritor Acquisition On August 3, 2022, we completed the acquisition of Meritor with a purchase price of $ 2. 9 billion (including debt repaid concurrent with the acquisition). Our consolidated results and segment results include Meritor' s activity since the date of acquisition. Meritor was split into the newly formed axles and brakes business and electric powertrain. The results for the axles and brakes business are included in our Components segment while the electric powertrain portion is included in our **Accelera** ~~New Power~~ segment. See NOTE ~~2~~ **24** ," ACQUISITIONS," to the Consolidated Financial Statements for additional information. ~~Supply Chain Disruptions We continue to experience supply chain disruptions, increased price levels and related financial impacts reflected as increased cost of sales and inventory holdings. Our industry continues to be unfavorably impacted by supply chain constraints leading to shortages and price increases across multiple component categories and limiting our collective ability to meet end- user demand. Our customers are also experiencing supply chain issues. Should the supply chain issues continue for an extended period of time or worsen, the impact on our production and supply chain could have a material adverse effect on our results of operations, financial condition and cash flows.~~ OPERATING SEGMENTS **As previously announced, beginning in the first quarter of 2023, we realigned certain businesses and regions within our reportable segments to be consistent with how our segment managers monitor the performance of our segments. We reorganized the businesses within our Components segment to carve out the electronics business into the newly formed software and electronics business and combined the turbo technologies and fuel systems businesses into the newly formed engine components business. On May 26, 2023, with the initial public offering (IPO), we changed the name of our Components' filtration business to Atmus. Our Components segment now consists of the following businesses: axles and brakes, emission solutions, engine components, Atmus, automated transmissions and software and electronics. In the first quarter of 2023, as a result of the indefinite suspension of operations in Russia, we reorganized the regional management structure of our Distribution segment and moved all Commonwealth of Independent States (CIS) sales into the Europe and Africa and Middle East regions. The Russian portion of prior period CIS sales moved to the Europe region. In March 2023, we rebranded our New Power segment as" Accelera" to better represent our commitment to zero- emission technologies. In addition, we moved our NPROXX joint venture from the Accelera segment to the Engine segment, which adjusted both the equity, royalty and interest income (loss) from investees and segment EBITDA (defined as earnings or losses before interest expense, income taxes, depreciation, amortization and noncontrolling interests) line items for the prior years. We started to report results for the changes within our operating segments effective January 1, 2023, and reflected these changes in the historical periods presented. See NOTE 23," FORMATION OF ATMUS AND IPO," to our Consolidated Financial Statements for additional information about the Atmus IPO.** We have five complementary operating segments: **Components,** Engine ~~, Components~~ , Distribution, Power Systems and **Accelera** ~~New Power~~ . These segments share technology, customers, strategic partners, brand recognition and our distribution network in order to compete more efficiently and effectively in their respective markets. In each of our operating segments, we compete worldwide with a number of other manufacturers and distributors that produce and sell similar products. Our products primarily compete on the basis of performance, price, total cost of ownership, fuel economy, emissions compliance, speed of delivery, quality and customer support. We use segment ~~earnings or losses before interest expense, income taxes, depreciation and amortization and noncontrolling interests (~~ EBITDA ~~)~~ as the ~~primary~~ basis for the Chief Operating Decision Maker to evaluate the performance of each of our reportable operating segments. We believe EBITDA is a useful measure of our operating performance as it assists investors and debt holders in comparing our performance on a consistent basis without regard to financing methods, capital structure, income taxes or depreciation and amortization methods, which can vary significantly depending upon many factors. See NOTE ~~24~~ **25** ," OPERATING SEGMENTS," to the Consolidated Financial Statements for additional information and a reconciliation of our segment information to the corresponding amounts in our Consolidated Statements of Net Income. ~~Engine~~ **Components** Segment ~~Engine~~ **Components** segment sales and EBITDA as a percentage of consolidated results were: Years ended December 31, ~~202220212020Percent~~ ---- **202320222021Percent** of consolidated net sales (1) ~~31~~ **32** % ~~33~~ **28** % ~~32~~ **26** % Percent of consolidated EBITDA (1) ~~38~~ **36** % 39 % 41 % (1)...... Percent of consolidated EBITDA (1) 33 % 33 ~~% 32~~ % (1) Measured before intersegment eliminations The Components segment supplies products which complement the Engine and

Power Systems segments, including ~~aftertreatment systems, turbochargers, transmissions, filtration products, electronics, fuel systems,~~ axles, drivelines, brakes and suspension systems for commercial diesel and natural gas applications **, aftertreatment systems, turbochargers, fuel systems, valvetrain technologies, filtration products, automated transmissions and electronics** . We develop **drivetrain systems,** aftertreatment systems, turbochargers, fuel ~~systems, drivetrain~~ systems, transmissions and electronics to meet increasingly stringent emission and fuel economy standards. **In conjunction with the realignment** ~~We manufacture filtration systems for on- and off~~ - **of certain businesses during the first quarter** ~~- highway heavy- duty and medium- duty equipment, and we are a supplier~~ of **2023, the** ~~filtration products for industrial vehicle applications. The~~ Components segment is organized around the following businesses: **• Axles and brakes- We design, manufacture and supply drivetrain systems, including axles, drivelines, brakes and suspension systems primarily for commercial vehicle and industrial applications. We also market and sell truck, trailer, on- and off- highway and other products principally for OEM dealers and other independent distributors and service garages within the aftermarket industry. We primarily serve markets in North America, Europe, South America, India, Asia Pacific and China.** • Emission solutions- We are a global leader in designing, manufacturing and integrating aftertreatment technology and solutions for the commercial on- and off- highway light- duty, medium- duty, heavy- duty and high- horsepower engine markets. Aftertreatment is the mechanism used to convert engine emissions of criteria pollutants, such as particulate matter, nitrogen oxides (NOx), carbon monoxide and unburned hydrocarbons into harmless emissions. Our products include custom engineering systems and integrated controls, oxidation catalysts, particulate filters, selective catalytic reduction systems and engineered components, including dosers. Our emission solutions business primarily serves markets in North America, Europe, China, India, Brazil and Asia Pacific. We serve both OEM first fit and retrofit customers. • **Engine components** ~~Axles and brakes~~ - We design, manufacture and ~~supply drivetrain~~ **market turbocharger, fuel** ~~systems~~ - **system** ~~, including axles, drivelines, brakes~~ and **valvetrain technologies** ~~suspension systems primarily~~ for **light** ~~commercial vehicle and industrial applications. We also market and sell truck, trailer, on~~ - ~~and off~~ **duty, mid** - ~~highway~~ **range, heavy- duty** and **high- horsepower** ~~other products principally for OEM dealers and other independent distributors and service garages within the aftermarket industry. We primarily serve~~ markets ~~in~~ **across** North America, **China,** Europe **and** ~~, South America,~~ India ~~, Asia Pacific and China~~ . • ~~Filtration~~ **Atmus** - We design, manufacture and sell filters, coolants and chemical products. Our ~~filtration~~ business offers ~~over 8, 800 products~~ **a full spectrum of filtration solutions** for first fit and aftermarket applications including air filters, fuel filters, fuel water separators, lube filters, hydraulic filters, coolants, fuel additives and other filtration systems to OEMs, dealers / distributors and end- users. We support a wide customer base in a diverse range of markets including on- and off- highway segments such as oil and gas, agriculture, mining, construction, power generation and marine. We produce and sell globally recognized Fleetguard ® branded products globally including in North America, Europe, Asia Pacific, South America, China, Africa and Middle East. Fleetguard products are available through thousands of distribution points worldwide ~~. • Turbo technologies- We design, manufacture and market turbochargers and engine brakes for light- duty, medium- duty, heavy- duty and high- horsepower markets with worldwide sales and distribution. We provide critical valvetrain and air handling technologies for engines to meet challenging performance requirements and worldwide emission standards. We primarily serve markets in North America, Europe, China, India, Asia Pacific and Brazil. • Electronics and fuel systems- We design, develop and supply electronic control modules, sensors and supporting software for on- highway, off- highway and power generation applications. We also design and manufacture new, replacement and remanufactured fuel systems for medium- duty, heavy- duty and high- horsepower diesel engine markets. We primarily serve markets in North America, China, India, Europe and Brazil~~ . • Automated transmissions- We develop and supply automated transmissions for the heavy- duty commercial vehicle market. Automated transmissions include automated manual transmissions, dual- clutch transmissions and automatic transmissions for internal combustion engines. The Eaton Cummins Automated Transmission Technologies (ECJV) joint venture is a consolidated 50 / 50 joint venture between Cummins Inc. and Eaton Corporation Plc. and serves markets in North America and China. **• Software and electronics- We develop, supply and remanufacture control units, specialty sensors, power electronics, actuators and software for on- highway, off- highway and power generation applications. We primarily serve markets in the Americas, China, India and Europe.** Customers of the Components segment generally include the Engine, Distribution ~~and~~ **,** Power Systems **and Accelera** segments, joint ventures including Tata Cummins Ltd. and Beijing Foton Cummins Engine Co., Ltd., truck manufacturers and other OEMs, many of which are also customers of the Engine segment, such as PACCAR **Inc. (PACCAR)** , Traton **Group (Traton)** , Daimler **Trucks North America (Daimler)** , Beiqi Foton Motor Company, Volvo, Stellantis **N. V. (Stellantis)** , Komatsu **Ltd. (Komatsu)** and other manufacturers that use our components in their product platforms. The Components segment competes with other manufacturers of aftertreatment systems, filtration, turbochargers, fuel systems, drivetrain systems and transmissions. Our primary competitors in these markets include Robert Bosch GmbH, Donaldson Company, Inc., Parker- Hannifin Corporation, Mann Hummel Group, Garrett Motion, Inc., Borg- Warner Inc., Tenneco Inc., Eberspacher Holding GmbH & Co. KG, Denso Corporation, Allison Transmission, Aisin Seiki Co., Ltd., ZF Friedrichshafen AG and Dana Incorporated. ~~Distribution~~ **Engine** Segment ~~Distribution~~ **Engine** segment sales and EBITDA as a percentage of consolidated results were: Years ended December 31, ~~202220212020Percent~~ ---- **202320222021Percent** of consolidated net sales (1) ~~26~~ **28** % ~~26~~ **31** % ~~29~~ **33** % Percent of consolidated EBITDA (1) **32 % 38 % 39 % (** 1) Measured before intersegment eliminations The Engine segment manufactures and markets a broad range of diesel and natural gas-powered engines under the Cummins brand name,as well as certain customer brand names,for the heavy ~~and~~ **- duty truck,** medium- duty truck ~~,~~ **and** bus, ~~recreational vehicle (RV),~~ light- duty automotive ~~,construction,mining,marine,rail,oil~~ and **off-highway** ~~gas,defense and agricultural~~ markets.We manufacture a wide variety of engine products including:• Engines with a displacement range of 2.8 to 15 liters and horsepower ranging from 48 to 715 and • New parts and service,as well as remanufactured parts and engines,primarily through our extensive distribution network.The Engine segment is organized by engine displacement size and serves these end- user markets:• Heavy- duty truck- We manufacture diesel and natural gas engines that range from 310 to 615 horsepower serving global heavy- duty truck customers worldwide,primarily in North America,China and Australia.• Medium- duty truck and bus- We manufacture diesel and natural gas engines ranging from 130 to 450 horsepower serving medium- duty truck and bus customers worldwide,with key markets including North America,Europe,Latin America,China,Australia and India.Applications include pick- up,delivery,emergency vehicles,regional haul and vocational trucks and school,transit and shuttle buses.We also provide diesel engines for Class A motor homes (RVs),primarily in North America.• Light- duty automotive (~~Pick~~ **pick** - up and ~~Light~~ **light** ~~Commercial~~ **commercial** ~~Vehicle~~ **vehicle** (LCV))- We manufacture 105 to 400 horsepower diesel engines,including engines for the pick- up truck market for Stellantis ~~N.V.(Stellantis)~~ in North America and LCV markets in Latin America and China.• Off- highway- We manufacture diesel engines that range from 48 to 715 horsepower serving key global markets including construction,mining,marine,rail,oil and gas,defense and agriculture and also the power generation business for standby,mobile and distributed power generation solutions throughout the world.The principal customers of our heavy- duty truck engines include truck manufacturers such as PACCAR ~~Inc.(PACCAR)~~ ,Traton ~~Group (Traton,formerly Navistar International Corporation)~~ and Daimler ~~Trucks North America (Daimler)~~ .The principal customers of our medium- duty truck **and bus** engines include truck manufacturers such as Daimler,Traton and PACCAR.The principal customers of our light- duty on- highway engines are Anhui Jianghuai Automobile Group Co.,Ltd.,Volkswagen Caminhões e Ônibus and China National Heavy Duty Truck Group.The principal customer of our pick- up on- highway engines is Stellantis.We sell our industrial engines to manufacturers of construction and agricultural equipment including Hyundai Heavy Industries, **Komatsu,Zoomlion Heavy Industry Science & Technology Co.,Ltd,** Xuzhou Construction Machinery Group, ~~Komatsu,John Deere,JLG Industries,Inc.and~~ Guangxi LiuGong Machinery Co.,Ltd **,JLG Industries,Inc.and Sany Group** .In the Engine segment,our competitors vary from country to country,with local manufacturers generally predominant in each geography.Other independent engine manufacturers include Weichai Power Co.Ltd.and Deutz AG.Truck OEMs may also elect to produce their own engines,and we must provide competitive products to win and keep their business.Truck OEMs that currently produce some or all of their own engines include Daimler,PACCAR,Traton,Volvo Powertrain,Ford Motor Company,China First Auto Works,Dongfeng Motor Corporation,CNH Industrial and Isuzu. ~~Components~~ **Distribution** Segment ~~Components~~ **Distribution** segment sales and EBITDA as a percentage of consolidated results were:Years ended December 31, ~~202220212020Percent~~ ---- **202320222021Percent of consolidated net sales (1) 25 % 26 % 26 % Percent of consolidated EBITDA (1) 24 %** 22 % 20 ~~% 22~~ % (1) Measured before intersegment eliminations The Distribution segment is our primary sales, service and support channel. The segment serves our customers and certified dealers through a worldwide network of wholly- owned, joint venture and independent distribution locations. Wholly- owned locations operate and serve markets in the ~~eight~~ **seven** geographic regions noted below. Joint venture locations serve markets in South America, Southeast Asia, India, Middle East and Africa, while independent distribution locations serve markets in these and other geographies. Distribution' s mission encompasses the sales and support of a wide range of products and services, including power generation systems, high- horsepower engines, heavy- duty and medium- duty engines designed for on- and off- highway use, application engineering services, custom- designed assemblies, retail and wholesale aftermarket parts and in- shop and field- based repair services. We also provide selected sales and aftermarket support for the **Accelera** ~~New Power~~ business. Our familiarity with a wide range of market applications allows us to tailor sales, service and support to meet customer- specific needs. **As previously announced, due to the indefinite suspension of operations in Russia, we reorganized the regional management structure of our Distribution segment and moved all CIS sales into the Europe and Africa and Middle East regions. The Russian portion of prior period CIS sales moved to the Europe region. We started to report results for our new regional management structure in the first quarter of 2023 and reflected these changes for historical periods.** The Distribution segment **is** ~~was historically~~ organized and managed as ~~eight~~ **seven** geographic regions, including North America, Asia Pacific, Europe, China, ~~Commonwealth of Independent States (CIS and historically mostly Russia),~~ Africa and Middle East, India and Latin America ~~. As the result of the indefinite suspension of our Russian operations due to the conflict in Ukraine in 2022, we are re- evaluating our regional structure for the remaining operations, excluding Russia, for 2023 and future years~~ . Across these regions, our locations compete with distributors or dealers that offer similar products. In many cases, these competing distributors or dealers are owned by, or affiliated with the companies that are listed as competitors of the **Components,** Engine ~~, Components~~ or Power Systems segments. These competitors vary by geographical location and application market. Power Systems Segment Power Systems segment sales and EBITDA as a percentage of consolidated results were: Years ended December 31, ~~202220212020Percent~~ ---- **202320222021Percent** of consolidated net sales (1) 14 % ~~15~~ **14** % 15 % Percent of consolidated EBITDA (1) **16 %** 15 % 14 ~~% 11~~ % (1) Measured before intersegment eliminations The Power Systems segment is organized around the following product lines: • Power generation- We are a global OEM offering standby and prime power generators ranging from 2 kilowatts to 3. 5 megawatts, as well as controls, paralleling systems and transfer switches, for customers with consumer, commercial, industrial, data center, health care, prime rental fleet and defense applications. We also provide turnkey solutions for distributed generation and energy management applications using natural gas, diesel and newer alternative sustainable fuels such as hydrotreated vegetable oil and renewable natural gas. • Industrial- We design, manufacture, sell and support diesel and natural gas high- speed, high- horsepower engines up to 4, 400 horsepower for a wide variety of equipment in mining, rail, defense, oil and gas and marine applications throughout the world. • Generator technologies- We design, manufacture, sell and support A / C generator / alternator products for internal consumption and for external generator set assemblers. Our products are sold under the Stamford ~~, Newage~~ and AVK brands and range in output from 7. 5 kilovolt- amperes (kVA) to 11, 200 kVA. Our customer base for Power Systems offerings is highly diversified, with customer groups varying based on their power needs. China, India, Europe, Asia Pacific, Latin America, the Middle East and Africa are our largest geographic markets outside of North America. In the markets served by the Power Systems segment, we compete with a variety of independent engine manufacturers and generator set assemblers as well as OEMs who manufacture engines for their own products around the world. Our primary competitors are ~~CAT~~ **Caterpillar, Inc.** , MTU (Rolls Royce Power Systems Group) and Kohler / SDMO (Kohler Group), but we also compete with INNIO, Generac, Mitsubishi Heavy Industries ~~(MHI)~~ and numerous regional generator set assemblers. Our alternator business competes globally with Leroy Somer ~~(NIDEC)~~ , Marathon Electric and Meccalte, among others. **Accelera** ~~New Power~~ Segment The **Accelera** ~~New Power~~ segment designs, manufactures, sells and supports hydrogen production ~~solutions~~ **technologies** as well as electrified power systems with innovative components and subsystems, including battery, fuel cell and electric powertrain technologies. The **Accelera** ~~New Power~~ segment is currently in the early stages of commercializing these technologies with efforts primarily focused on the development of our electrolyzers for hydrogen production and electrified power systems and related components and subsystems. We anticipate our customer base for **Accelera** ~~New Power~~ offerings will be highly diversified, representing multiple end markets with a broad range of application requirements. This includes new markets, like the growing green hydrogen market, which we serve with our leading ~~electrolyzer~~ **hydrogen production** technologies. We will continue to pursue relationships in markets as they adopt hydrogen and electric solutions. In the markets served by the **Accelera** ~~New Power~~ segment, we compete with emerging fuel cell and battery companies, powertrain component manufacturers, vertically integrated OEMs and entities providing hydrogen production solutions. Our primary competitors include ~~Proterra Inc,~~ Daimler, PACCAR, Volvo, Traton, BYD Company Limited, Dana Incorporated, BorgWarner Inc., Ballard Power Systems, Inc., Nel ASA **, ITM Power, Siemens Energy, Thyssenkrupp** and Plug Power Inc. JOINT VENTURES, ALLIANCES AND NON- WHOLLY- OWNED SUBSIDIARIES We entered into a number of joint venture agreements and alliances with business partners around the world. Our joint ventures are either distribution or manufacturing entities. We also own controlling interests in non- wholly- owned manufacturing and distribution subsidiaries. In the event of a change of control of either party to certain of these joint ventures and other strategic alliances, certain consequences may result including automatic termination and liquidation of the venture, exercise of" put" or" call" rights of ownership by the non- acquired partner, termination or transfer of technology license rights to the non- acquired partner and increases in component transfer prices to the acquired partner. We will continue to evaluate joint venture and partnership opportunities in order to penetrate new markets, develop new products and generate manufacturing and operational efficiencies. Financial information about our investments in joint ventures and alliances is incorporated by reference from NOTE 4," INVESTMENTS IN EQUITY INVESTEES," to the Consolidated Financial Statements. Our equity income from these investees was as follows: Years ended December 31, In ~~millions202220212020Manufacturing~~ ---- **millions202320222021Manufacturing** entities Dongfeng Cummins Engine Company, Ltd. **$ 65 19 %** $ 45 20 % $ 82 19 % ~~$ 63 17 %~~ Beijing Foton Cummins Engine Co., Ltd. **47 14 %** 37 17 % 112 26 % ~~113 30 %~~ Chongqing Cummins Engine Company, Ltd. **36 11 %** 32 14 % 39 9 % ~~35~~ **Tata Cummins, Ltd. 29** 9 % ~~Tata Cummins, Ltd.~~ 27 12 % 18 4 % ~~19~~ **All other manufacturers91 27 % 28** (1 ~~) 5 % All other manufacturers28 (2~~) 12 % 131 32 % ~~115 (3) 30 %~~ Distribution entitiesKomatsu Cummins Chile, Ltda. **55 16 %** 44 20 % 32 8 % ~~31 8 %~~ All other ~~distributors11~~ **distributors16 4 % 11** 5 % 10 2 % ~~2 1 %~~ Cummins share of net income (~~4~~ **2**) **$ 339 100 %** $ 224 100 % $ 424 100 % ~~$ 378 100 %~~ (1 ~~) Includes $ 18 million in favorable adjustments related to tax changes within India' s 2020- 2021 Union Budget of India (India Tax Law Change) passed in March 2020. See NOTE 5," INCOME TAXES," to our Consolidated Financial Statements for additional information on India Tax Law Change. (2~~) Includes a $ 28 million impairment of our joint venture with KAMAZ and $ 3 million of royalty charges as part of our costs associated with the **indefinite** suspension of our Russian operations. In addition, on February 7, 2022, we purchased Westport Fuel System Inc.' s stake in Cummins Westport, Inc. (Westport JV). See NOTE ~~2~~ **24** ," ACQUISITIONS," and NOTE ~~23~~ **22** ," RUSSIAN OPERATIONS," to our Consolidated Financial Statements for additional information. (**2** ~~3) Includes $ 19 million in favorable adjustments related to India Tax Law Change, impairment charges of $ 13 million and loss on sale of business of $ 8 million for a joint venture in the Power Systems segment. See NOTE 5," INCOME TAXES," to our Consolidated Financial Statements for additional information on India Tax Law Change. (4~~) This total represents our share of net income of our equity investees and is exclusive of royalties and interest income from our equity investees. To see how this amount reconciles to ~~Equity~~ **equity** , royalty and interest income from investees in the Consolidated Statements of Net Income, see NOTE 4," INVESTMENTS IN EQUITY INVESTEES," to our Consolidated Financial Statements for additional information. Manufacturing Entities Our manufacturing joint ventures were generally formed with customers and are primarily intended to allow us to increase our market penetration in geographic regions, reduce capital spending, streamline our supply chain management and develop technologies. Our largest manufacturing joint ventures are based in China and are included in the list below. Our engine manufacturing joint ventures are supplied by our Components segment in the same manner as it supplies our wholly- owned Engine segment and Power Systems segment manufacturing facilities. Our Components segment joint ventures and wholly- owned entities provide ~~electronics~~ **axles, drivelines, brakes and suspension systems for commercial diesel and natural gas applications, aftertreatment systems, turbochargers** , fuel systems, filtration ~~, aftertreatment systems, turbocharger~~ products, ~~axles, drivelines, braking systems and~~ automated transmissions **and electronics** that are used with our engines as well as some competitors' products. The results and investments in our joint ventures in which we have 50 percent or less ownership interest (except for **ECJV** ~~Eaton Cummins Automated Transmission Technologies joint venture~~ , which is consolidated due to our majority voting interest) discussed below are included in equity, royalty and interest income from investees and investments and advances related to equity method investees in our Consolidated Statements of Net Income and Consolidated Balance Sheets, respectively. • Dongfeng Cummins Engine Company, Ltd.- Dongfeng Cummins Engine Company, Ltd. (DCEC) is a joint venture in China with Dongfeng Automotive Co. Ltd., a subsidiary of Dongfeng Motor Corporation and one of the largest medium- duty and heavy- duty truck manufacturers in China. DCEC produces 3. 9 liter to 14. 5 liter diesel engines with a power range from 80 to 760 horsepower, natural gas engines and automated transmissions. On- highway engines are used in multiple applications in light- duty and medium- duty trucks, special purpose vehicles, buses and heavy- duty trucks with a main market in China. Off- highway engines are used in a variety of construction, power generation, marine and agriculture markets in China. • Beijing Foton Cummins Engine Co., Ltd.- Beijing Foton Cummins Engine Co., Ltd. is a joint venture in China with Beiqi Foton Motor Co., Ltd., a commercial vehicle manufacturer, which has two distinct lines of business- a light- duty business and a heavy- duty business. The light- duty business produces our families of ISF 2. 5 liter to 4. 5 liter high performance light- duty diesel engines in Beijing. These engines are used in light- duty and medium- duty commercial trucks, pick- up trucks, buses, multipurpose and sport utility vehicles with main markets in China and Brazil. Certain types of small construction equipment and industrial applications are also served by these engine families. The heavy- duty business produces **8** ~~the X11, X12, X13 and X15, ranging from 10~~. 5 liter to 14. 5 liter ~~,~~ high performance heavy- duty diesel ~~engines~~ and natural gas engines in Beijing. Certain types of construction equipment and industrial applications are also served by these engine families. • Chongqing Cummins Engine Company, Ltd.- Chongqing Cummins Engine Company, Ltd. is a joint venture in China with Chongqing Machinery and Electric Co. Ltd. This joint venture manufactures several models of our heavy- duty and high- horsepower diesel engines primarily serving the industrial and stationary power markets in China. • Tata Cummins, Ltd.- Tata Cummins, Ltd. is a joint venture in India with Tata Motors Ltd., the largest automotive company in India and a member of the Tata group of companies. This joint venture manufactures Cummins' 3. ~~80 to~~ 8 **to 8**. 9 ~~–~~ liter diesel and natural gas engines in India with a power range from 75 to 400 horsepower for use in trucks **and buses** manufactured by Tata Motors, as well as for various **on- highway,** industrial and power generation applications for Cummins **. In September 2023, our Accelera business signed an agreement to form a joint venture with Daimler Trucks and Buses US Holding LLC (Daimler Truck), PACCAR Inc. (PACCAR) and EVE Energy to accelerate and localize battery cell production and the battery supply chain in the U. S., including building a 21- gigawatt hour battery production facility in Marshall County, Mississippi. The joint venture will manufacture battery cells for electric commercial vehicles and industrial applications. Accelera, Daimler Truck and PACCAR will each own 30 percent of the joint venture, while EVE Energy will own 10 percent. Total investment by the partners is expected to be in the range of $ 2 billion to $ 3 billion for the 21- gigawatt hour facility. The transaction is subject to closing conditions and receipt of applicable merger control and regulatory approvals including submission of a voluntary notice to the Committee on Foreign Investment in the U. S**. Distribution Entity Komatsu Cummins Chile, Ltda.- Komatsu Cummins Chile, Ltda. is a joint venture with Komatsu America Corporation. The joint venture is a distributor that offers the full range of our products and services to customers and end- users in Chile and Peru. See further discussion of our distribution network under the Distribution segment section above. Non- Wholly- Owned Subsidiaries **• Atmus Filtration Technologies Inc. (Atmus)- We have a controlling interest in Atmus, which is a publicly listed company on the New York Stock Exchange (NYSE) and began trading on May 26, 2023. Atmus develops, designs, manufactures and sells filters, coolant and chemical products and offers products for first fit and aftermarket applications including air filter, fuel filters, fuel water separators, lube filters, hydraulic filters, coolants, fuel additives and other filtration systems to OEMs, dealers / distributors and end- users. • Eaton Cummins Automated Transmission Technologies-** We have a majority voting interest in ECJV by virtue of a tie- breaking vote on the joint venture' s board of directors. ECJV develops and supplies automated transmissions for the heavy- duty commercial vehicle markets in North America and China. **• Cummins India Ltd. (CIL)-** We have a controlling interest in Cummins India Ltd. (CIL), which is a publicly listed company on various stock exchanges in India. CIL produces medium- duty, heavy- duty and high- horsepower diesel engines ~~,~~ **and** generators for the Indian and export markets and natural gas spark- ignited engines for power generation, automotive and industrial applications. CIL also has distribution and power generation operations ~~. We have a controlling interest in Hydrogenics Corporation (Hydrogenics), which is consolidated in the New Power segment. Hydrogenics is a developer and manufacturer of proton exchange membrane fuel cell products as well as alkaline and proton exchange membrane electrolyzer solutions~~. SUPPLY The performance of the end- to- end supply chain, extending through to our suppliers, is foundational to our ability to meet customers' expectations and support long- term growth. We are committed to having a robust strategy for how we select and manage our suppliers to enable a market focused supply chain. This requires us to continuously evaluate and upgrade our supply base, as necessary, as we strive to ensure we are meeting the needs of our customers. We use a combination of proactive and reactive methodologies to enhance our understanding of supply base risks, which guide the development of risk monitoring and sourcing strategies. Our category strategy process supports the review of our long- term needs and guides decisions on what we make internally and what we purchase externally. For ~~the~~ **externally purchased** items ~~we decide to purchase externally~~, the strategies also identify the suppliers we should ~~enter into~~ **consider for** long- term supply agreements to provide the best technology, the lowest total cost and highest supply chain performance. We design and / or manufacture our strategic components used in or with our engines ~~and~~ **,** power generation units and **Accelera** ~~New Power~~ products. Key suppliers are managed through long- term supply agreements that seek to secure capacity, delivery ~~,~~ **and** quality and **to assure** cost requirements are met over an extended period. Other important elements of our sourcing strategy include the following: • expanding risk management scope to include sub- tier value chain suppliers for critical components; • broadening dual and multi- sourcing where applicable; • selecting and managing suppliers to comply with our Supplier Code of Conduct; and • assuring our suppliers comply with our prohibited and restricted materials policy. ~~As we adjust to the current global~~ **We made significant progress in restoring and maintaining continuity of our** supply ~~chain~~ **chains** ~~challenges~~ **in 2023; however**, **disruption risk in certain categories of our** ~~global inflationary pressures and other global macroeconomic forces, we are experiencing~~ supply ~~chain~~ **chains still exist** ~~disruptions, incremental costs~~ and ~~related challenges throughout the supply chain~~ **could negatively impact our ability to meet customer demand**. We continue to monitor the supply chain disruptions utilizing early detection ~~technology~~ **methods** complemented by structured supplier risk and resiliency assessments. We increased frequency of formal and informal supplier engagement to address potentially impactful supply base constraints and enhanced collaboration to develop specific countermeasures to mitigate risks ~~. Our global team, located in different regions of the world, uses various approaches to identify and resolve threats to supply continuity~~. PATENTS AND TRADEMARKS We own or control a significant number of patents and trademarks relating to the products we manufacture. These patents and trademarks were granted and registered over a period of years. Although these patents and trademarks are generally considered beneficial to our operations, we do not believe any patent, group of patents or trademark (other than our leading brand house trademarks) is significant to our business. SEASONALITY While individual product lines may experience modest seasonal variation in production, there is no material effect on the demand for the majority of our products on a quarterly basis ~~with the exception that our Power Systems segment normally experiences seasonal declines in the first quarter due to general declines in construction spending during this period~~ . LARGEST CUSTOMERS We have thousands of customers around the world and have developed long- standing business relationships with many of them. PACCAR is our largest customer, accounting for 16 percent of our consolidated net sales in **2023, 16 percent in** 2022 ~~,~~ **and** 15 percent in 2021 ~~and 15 percent in 2020~~ . We have long- term supply agreements with PACCAR for our heavy- duty and medium- duty engines and aftertreatment systems. While a significant number of our sales to PACCAR are under long- term supply agreements, these agreements provide for particular engine requirements for specific vehicle models and not a specific volume of engines or aftertreatment systems. PACCAR is our only customer accounting for more than 10 percent of our net sales in ~~2022~~ **2023** . The loss of this customer or a significant decline in the production level of PACCAR vehicles that use our engines would have an adverse effect on our results of operations and financial condition. We have supplied engines to PACCAR for ~~78~~ **79** years. A summary of principal customers for each operating segment is included in our segment discussion. In addition to our agreement with PACCAR, we have long- term heavy- duty and medium- duty engine and aftertreatment system supply agreements with Traton and Daimler. We also have an agreement with Stellantis to supply engines for its ~~Ram~~ **pick- up** ~~trucks~~ - **truck applications** . Collectively, our net sales to these four customers, including PACCAR, were ~~36~~ **37** percent of our consolidated net sales in **2023, 36 percent in** 2022 ~~,~~ **and** 33 percent in 2021 ~~and 32 percent in 2020~~ . Excluding PACCAR, net sales to any single customer were less than ~~8~~ **9** percent of our consolidated net sales in ~~2022~~ **2023** , less than 8 percent in ~~2021~~ **2022** and less than ~~7~~ **8** percent in ~~2020~~ **2021** . These agreements contain standard purchase and sale agreement terms covering engine, aftertreatment and engine parts pricing, quality and delivery commitments, as well as engineering product support obligations. The basic nature of our agreements with OEM customers is that they are long- term price and operations agreements that help provide for the availability of our products to each customer through the duration of the respective agreements. Agreements with most OEMs contain bilateral termination provisions giving either party the right to terminate in the event of a material breach, change of control or insolvency or bankruptcy of the other party. BACKLOG ~~As we adjust to the current global~~ **We made significant progress in restoring and maintaining continuity of our** supply ~~chain~~ **chains** ~~challenges~~ **in 2023; however** , **disruption risk in certain categories of our** ~~global inflationary pressures and other global macroeconomic forces, we are experiencing~~ supply ~~chain~~ **chains still exist** ~~disruptions, incremental costs~~ and **could negatively** ~~related challenges throughout the supply chain. The supply chain disruptions are impacting~~ --- **impact** our **ability to meet** ~~business as well as our suppliers and customers~~ - **customer demand** ~~resulting in longer lead times in some of our businesses~~ . We have supply agreements with some truck and off- highway equipment OEMs **and firm orders from data center and electrolyzer customers** , however ~~most~~ **a large portion** of our business is transacted through open purchase orders. **Many of** ~~These~~ **these** open orders are historically subject to month- to- month releases and are subject to cancellation on reasonable notice without cancellation charges and therefore are not considered firm. We ~~are working~~ **continue to work** closely with our suppliers **and** ~~as discussed in the Supply section above as well as with~~ customers to meet the demand ~~and work through backlogs as efficiently as possible~~ . RESEARCH AND DEVELOPMENT In ~~2022~~ **2023** , we continued to invest in future critical technologies and products. We will continue to make investments to develop new products and improve our current technologies to meet future emission standards around the world, improvements in fuel economy performance of diesel and natural gas **-** powered engines and related components **,** as well as development activities around **hydrogen engine solutions,** battery electric, fuel cell electric and hydrogen ~~engine solutions~~ **production technologies** . Our research and development programs are focused on product improvements, product extensions, innovations and cost reductions for our customers. Research and development expenditures include salaries, contractor fees, building costs, utilities, testing, technical information technology expenses, administrative expenses and allocation of corporate costs and are expensed, net of contract reimbursements, when incurred. From time to time, we enter into agreements with customers and government agencies to fund a portion of the research and development costs of a particular project. When not associated with a sales contract, we generally account for these reimbursements as an offset to the related research and development expenditure. Research and development expenses, net of contract reimbursements, were $ 1. **4 billion in 2023, $ 1.** 2 billion in 2022 ~~,~~ **and** $ 1. 1 billion in 2021 ~~and $ 903 million in 2020~~ . Contract reimbursements were $ **81 million, $** 110 million ~~,~~ **and** $ 104 million ~~and $ 86 million~~ in **2023,** 2022 ~~,~~ **and** 2021 ~~and 2020~~ , respectively. ENVIRONMENTAL SUSTAINABILITY We are committed to making people' s lives better by powering a more prosperous world. That prosperity includes strong communities, robust business and environmental sustainability. The highest level of accountability for our climate- related risks and opportunities is with the Safety, Environment and Technology (SET) Committee of the Board of Directors (the Board). The internal Action Committee for Environmental Sustainability meets monthly and reports to the Chief Executive Officer (CEO) and to the SET Committee at least annually. In 2019, we introduced PLANET 2050, a sustainability strategy focused on three priority areas: addressing climate change and air emissions, using natural resources in the most sustainable way and improving communities. Additional commitments followed including Cummins Water Works, our program for strengthening communities through sustainable water and addressing the global water crisis, and Destination Zero, our long- term product decarbonization strategy. The PLANET 2050 strategy includes nine specific goals to achieve by 2030, including science- based ~~carbon dioxide~~ **greenhouse gas (GHG)** reduction targets for newly sold products and facilities, as well as aspirational targets for 2050. We started reporting progress **on these nine goals, most of which have a baseline year of 2018,** in 2022. Key **actions** ~~areas of focus~~ in ~~2022~~ **2023** included **increasing planned capital spending to meet the 2030 facility reduction goals for GHG emissions, water and waste; improving GHG measurement and modeling for** product **emissions;** ~~decarbonization pathways, customer sustainability collaboration~~ and ~~circular economy efforts such as incorporating expanded lifecycle analysis tools~~ **identifying technology portfolio opportunities toward progress of product GHG reduction. In**

2023, we also released our formal Environmental Justice and Prosperity Policy reflecting our commitment to prosperity with less impact on the planet and its people. The nine PLANET 2050 goals for 2030 are as follows: • Reduce absolute ~~greenhouse gas (~~ GHG ~~)~~ emissions from facilities and operations by 50 percent. • Reduce scope three absolute lifetime GHG emissions from newly sold products by 25 percent. • Partner with customers to reduce scope three GHG emissions from products in the field by 55 million metric tons. • Reduce volatile organic compounds emissions from paint and coating operations by 50 percent. • Create a circular lifecycle plan for every part to use less, use better, use again. • Generate 25 percent less waste in facilities and operations as percent of revenue. • Reuse or responsibly recycle 100 percent of packaging plastics and eliminate single- use plastics in dining facilities, employee amenities and events. • Reduce absolute water consumption in facilities and operations by 30 percent. • Produce net water benefits that exceed our annual water use in all our regions. The most recent Sustainability Progress Report, prior reports and a Data Book of more detailed environmental data in accordance with the Global Reporting Initiative' s Standard core compliance designation is available on our website at www. cummins. com. Our annual submission to the Carbon Disclosure Project (CDP) for climate change and water are also available on the website. The climate submission provides information on our scenario planning for climate and other risks and detailed facility emissions data as requested by CDP. We also published reports in accordance with the Sustainability Accounting Standards Board as well as the framework of the Task Force on Climate- Related Financial Disclosures. These reports and data book are not incorporated into this Form 10- K by reference. We continue to articulate our positions on key public policy issues and on a wide range of environmental issues. We are actively engaged around the world to promote science- based climate policies by working with regulatory, industry and other stakeholders, including joining advocacy groups and testifying before legislators and regulators. We will continue to work in partnership with others to advocate for tough, clear and enforceable regulations around the globe to address air and GHG emissions. **ENVIRONMENTAL COMPLIANCE Agreement in Principle** In **December** ~~2022~~ **2023**, we ~~were named to~~ **announced that we reached an agreement in principle with** the **U.** S ~~& P Dow~~ **. Environmental Protection Agency (EPA), the California Air Resources Board (CARB), the Environmental and Natural Resources Division of the U. S. Department of Justice (DOJ) and the California Attorney General' s Office (CA AG) to resolve certain regulatory civil claims regarding our emissions certification and compliance process for certain engines primarily used in pick- up truck applications in the U. S. (collectively, the Agreement in Principle). As part of the Agreement in Principle, among other things, we agreed to pay civil penalties, complete recall requirements, undertake mitigation projects, provide extended warranties, undertake certain testing, take certain corporate compliance measures and make certain payments. Failure to comply with the terms and conditions of the Agreement in Principle will subject us to further stipulated penalties. We recorded a charge of $ 2. 036 billion in the fourth quarter of 2023 to resolve the matters addressed by the Agreement in Principle involving approximately** ~~Jones~~ -- **one** ~~World and North American Sustainability Indices~~ **million of our pick- up truck applications in the U** . ~~It~~ **S. This charge** was **in addition to the previously announced charges of $ 59 million for the recalls of model years 2013 through 2018 RAM 2500 and 3500 trucks and model years 2016 through 2019 Titan trucks. The Agreement in Principle remains subject to final regulatory and judicial approvals. We have also been in communication with** ~~the~~ **other** ~~seventeenth consecutive time~~ **non- U. S. regulators regarding matters related to the emission systems in our engines and may also become subject to additional regulatory review in connection with these matters. In connection with our announcement of our entry into the Agreement in Principle,** we ~~were named~~ **have become subject** to **shareholder, consumer** ~~the North American index~~ and **third- party litigation regarding** the ~~second time~~ **matters covered by the Agreement in Principle and** we ~~were named~~ **may become subject** to ~~the world index since 2013. In 2021, we were named one of the inaugural recipients of the Terra Carta Seal by the Sustainable Markets Initiative, the effort founded by King Charles III while the Prince of Wales to recognize industry leaders in environmental sustainability. In addition~~ **additional** ~~,~~ **litigation** in **connection with these matters** ~~2022 we were awarded a gold medal for sustainability performance by EcoVadis, a globally collaborative platform for trading partners to share sustainability performance information~~ . ~~We were named~~ **See NOTE 15," COMMITMENTS AND CONTINGENCIES,"** to ~~Investor Business Daily~~ **the Consolidated Financial Statements and the" LIQUIDITY AND CAPITAL RESOURCES" section within Management** ' s **Discussion and Analysis** ~~Best ESG Companies list~~ for **additional information** ~~performance on environmental, social and governance matters, ranking number 27~~ . ~~We were also ranked number 47 among Barron' s Top 100 Most Sustainable Companies. ENVIRONMENTAL COMPLIANCE~~ Product Certification and Compliance Our ~~engines~~ **products** are subject to extensive statutory and regulatory requirements **worldwide** that directly or indirectly impose standards governing emissions and noise. Over the past several years **,** we have increased our global environmental compliance presence and expertise to understand and meet emerging product environmental regulations around the world. Our ability to comply with these and future emission standards is an essential element in maintaining our leadership position in regulated markets. We strive to be a leader in developing and implementing technologies that provide customers with the highest performing products while minimizing the impact on the environment, and we have a long history of working with governments and regulators to achieve these goals. We remain committed to ensuring our products meet all current and future emission standards and delivering value to our customers. Announced in late 2019 and launched in early 2020, the Product Compliance and Regulatory Affairs team leads both engine emissions certification and compliance and regulatory affairs initiatives and ~~reports~~ **provides updates** to the SET Committee of the Board at least annually. This organization is led by the Vice President- Product Compliance and Regulatory Affairs **and reports directly to the Chief Administrative Officer and the CEO for product emissions matters**. The focus of this organization is to strengthen our ability to design great products that help our customers win while complying with increasingly challenging global emission regulations. The organization also works to enhance our collaboration with the agencies setting the direction and regulations of emissions as we strive to meet every expectation today while planning for future changes. ~~Following conversations with the U. S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) regarding certification for the engines in the 2019 RAM 2500 and 3500 trucks, we~~

~~made the decision to review our certification process and compliance with emission standards. This review is being conducted with external advisors as we strive to ensure the certification and compliance processes for all of our pick- up truck applications are consistent with our internal policies, engineering standards and applicable laws. During conversations with the EPA and CARB about the effectiveness of our pick- up truck applications, the regulators raised concerns that certain aspects of our emissions systems may reduce the effectiveness of our emissions control systems and thereby act as defeat devices. As a result, our internal review focuses, in part, on the regulators' concerns. We are working closely with the regulators to enhance our emissions systems to improve the effectiveness of all of our pick- up truck applications and to fully address the regulators' requirements. Based on discussions with the regulators, we have developed a new calibration for the engines in model year 2019 RAM 2500 and 3500 trucks that has been included in all engines shipped since September 2019. During our ongoing discussions, the regulators turned their attention to other model years and other engines, most notably our pick- up truck applications for RAM 2500 and 3500 trucks for model years 2013 through 2018 and Titan trucks for model years 2016 through 2019. We have also been in communication with Environmental and Climate Change Canada regarding similar issues relating to some of these very same platforms. In connection with these and other ongoing discussions with the EPA and CARB, we are developing a new software calibration and will recall model years 2013 through 2018 RAM 2500 and 3500 trucks. We are also developing a new software calibration and hardware fix and will recall model years 2016 through 2019 Titan trucks. We will continue to work together closely with the relevant regulators to develop and implement recommendations for improvement as part of our ongoing commitment to compliance. See NOTE 15," COMMITMENTS AND CONTINGENCIES," to the Consolidated Financial Statements for additional information. Engine Certifications Our engines are certified globally through various categories within on- highway and off- highway applications. Regulations in these categories typically control nitrogen oxides (NOx), particulate matter (PM) and GHG. The current on- highway NOx and PM emission standards came into effect in India on April 1, 2020, (Bharat Stage VI), China on July 1, 2019, (National Standard NS VI), the European Union (EU) on January 1, 2013, (Euro VI) and on January 1, 2010, for the EPA. To meet these regulations, mid- range and heavy- duty engines for India, China, EU and EPA require NOx aftertreatment. NOx reduction is achieved by an integrated technology solution comprised of the XPI High Pressure Common Rail fuel system, SCR technology (in some cases), next- generation cooled EGR, advanced electronic controls, proven air handling and the Cummins Diesel Particulate Filter (DPF). The Ministry of Road Transport and Highways, Ministry of Ecology and Environment, EU, EPA and CARB certified that our engines meet the current emission requirements. Emission standards in international markets, including Japan, Mexico, Australia and Brazil are becoming more stringent. We believe that our experience in meeting the EU and EPA emission standards leaves us well positioned to take advantage of opportunities in these markets as the need for emission control capability grows. In 2013, we certified to EPA' s first ever GHG regulations for on- highway medium and heavy- duty engines. Additionally, the EPA' s 2013 regulations added the requirement of on- board diagnostics, which were introduced on the ISX 15 in 2010, across the full on- highway product line while maintaining the same near- zero emission levels of NOx and PM required in 2010. On- board diagnostics provide enhanced service capability with standardized diagnostic trouble codes, service tool interface, in- cab warning lamp and service information availability. The new GHG and fuel- efficiency regulations were required for all heavy- duty diesel and natural gas engines beginning in January 2014. Our GHG certification was the first engine certificate issued by the EPA and uses the same proven base engine with the XPI fuel system, variable geometry turbocharger (VGTTM) and Cummins aftertreatment system with DPF and SCR technology. Application of these engines and aftertreatment technologies continues in our products that comply with the 2021 GHG regulations. Our off- highway engines designed for Tier 4 / Stage V standards were based on our extensive on- highway experience developing SCR, high pressure fuel systems, DPF and VGTTM. Our products offer low fuel consumption, high torque rise and power output, extended maintenance intervals, reliable and durable operation and a long life to overhaul period, all while meeting the most stringent emission standards in the industrial market. Our off- highway products power multiple applications including construction, mining, marine, agriculture, rail, defense and oil and gas and serve a global customer base. The current EPA Tier 4 off- highway emission standards came into effect between 2013- 2015 for all engine power categories. The current EU Stage V off- highway emission standards became effective in 2019 for certain engine power categories and were completely effective January 2021 for all remaining categories.~~ Other Environmental Statutes and Regulations Expenditures for environmental control activities and environmental remediation projects at our facilities in the U. S. were not a substantial portion of our annual expenses and are not expected to be material in ~~2023~~ **2024** . We believe we are in compliance in all material respects with laws and regulations applicable to our plants and operations. In the U. S., pursuant to notices received from federal and state agencies and / or defendant parties in site environmental contribution actions, we were identified as a potentially responsible party under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended or similar state laws, at fewer than 20 **manufacturing and** waste disposal sites. Based upon our experiences at similar sites we believe that our aggregate future remediation costs will not be material. We have established accruals that we believe are adequate for our expected future liability with respect to these sites. In addition, we have several other sites where we are working with governmental authorities on remediation projects. The costs for these remediation projects are not expected to be material. HUMAN CAPITAL RESOURCES At December 31, ~~2022~~ **2023** , we employed approximately ~~73~~ **75** , ~~600~~ **500** persons worldwide ~~, which includes the addition of more than 10, 000 employees to our organization through acquisitions completed in 2022~~ . Approximately ~~23~~ **21** , ~~400~~ **900** of our employees worldwide ~~are~~ **were** represented by various unions under collective bargaining agreements that expire between ~~2023~~ **2024** and ~~2027~~ **2028** . Throughout our more than 100- year history, we always recognized that people drive the strength of our business and our ability to effectively serve our ~~clients~~ **customers** and sustain our competitive position. We are focused on harmonizing our approach to talent to provide seamless opportunities and better experiences to our employees around the world. Our workforce strategy cultivates an environment where all employees, regardless of employee type and location, know what is expected of them, are rewarded based on performance and have access to differentiated experiences, tools and leadership coaching to help them develop. This strategy has several key focus areas: creating a diverse, accessible, equitable and inclusive work environment; engaging employees and their families in improving wellness; developing self- aware and effective leaders and extending our talent development programs to our workforce at every level ~~and job type~~ . Leadership and Talent ~~Management Managing~~ **Development Developing** our human capital resources is a key focus of the company. **The** ~~In 2020, the~~ Board **continues its commitment to overseeing and providing guidance to our leadership team since** ~~recast~~ **recasting** our **former** Compensation Committee ~~as~~ **in 2020 to currently** the Talent Management ~~and~~ Compensation Committee ~~to reflect the Board' s commitment to overseeing and providing guidance to our leadership team in this important work~~ . We strive to create a leadership culture that begins with authentic leaders who create an outstanding place to work by encouraging all employees to achieve their full potential. We encourage leaders to connect our people and their work to our mission, vision, values, brand promise and strategies of the company, motivating and giving them a higher sense of purpose. We have designed leadership and talent development programs for employees ranging from the manufacturing floor and technicians through middle management and executives. **We** ~~When an individual joins Cummins, we~~ are committed to **cultivating a learning culture by** providing ~~both that employee~~ **employees** and their ~~manager~~ **managers** with the tools and resources to ~~manage~~ **have meaningful conversations, envision and plan** their career **, thrive in their work** and navigate in a large global organization. Through our ~~Talent~~ **talent** ~~Management~~ strategy **,** our goal is to provide all employees **equitable** access to the development and career opportunities that a global company enables. Competitive Pay and Benefits To attract and retain the best employees, we focus on providing **progressive,** competitive pay and benefits. Our programs target the market for competitiveness and sustainability while ensuring that we honor our core values. We provide benefit programs with the goal of improving the physical, ~~mental~~ **emotional, social** and financial wellness of our employees throughout their lifetime. Some examples include base and variable pay, medical, paid time off, retirement saving plans and employee stock purchase plans. When designing our base pay ~~compensation~~ ranges, we ~~do~~ **conduct** market analyses to ~~be sure~~ **ensure our** ranges are ~~current~~ **competitive** and our employees are advancing their earning potential. We also ~~do~~ **perform** annual compensation studies to assess market movement, pay equity and living wages. We review wages globally as we continuously work to ensure we are fair, equitable, competitive and can attract and retain the best talent ~~. As an example, during 2022, to recognize extraordinary efforts by employees during the challenges over the last several years, as well as to promote retention in a period of tight labor markets, a one- time employee recognition bonus was provided~~ . We also provide diverse benefit programs that are aligned with our values and focused on supporting employees and their families based on their unique needs, some of which ~~are~~ **include the following** : ~~tiered health~~ **healthcare** ~~care~~ **plans that offer lower out- of- pocket** costs **and higher** ~~so that more junior employees~~ **employer** ~~pay less for their premiums~~ **- paid Health Savings Account contributions to lower wage earners** ; paid parental leave for primary and secondary caregivers; **travel benefits and** advanced medical services ~~from clinicians~~ to support complex health care needs ~~and~~ **; global** employee assistance programs with diverse providers ~~that can~~ **; and a global mental health program, all designed to** meet ~~a range of~~ employee needs from race **-** related trauma to financial planning to transgender transition support **and more** . Employee Safety and Wellness Cummins is committed to being world- class in health and safety. We strive to ensure a **hazard- free** workplace with zero incidents. We are committed to removing conditions that cause personal injury or occupational illness and we make decisions and promote behaviors that protect others from risk of injury. We publicly disclose metrics on our rate of recordable injuries, our rate of lost workdays due to injury **,** ~~and the~~ rate of **ergonomic** injuries ~~involving contractors~~ **and rate of potentially serious injuries and fatalities** . Since 2020, we have taken many steps in the employee safety and wellness area including the following: • Executed robust safety protocols for essential on- site personnel. • Implemented a remote work environment where possible for employees who prefer working off- site **, including remote ergonomic evaluations and support. • Provided high- quality clinical services at onsite and near- site medical clinics at 36 key locations across the globe to support employee health and well- being** . • Launched a global mental health ~~awareness~~ campaign to destigmatize ~~conditions such as depression~~ and **normalize discussions about mental health, promote mental well- being,** encourage employees ~~to seek support offered by us. • Launched an~~ **and** ~~aggressive global effort to acquire vaccines and provide them on- site or near- site to our employees,~~ their families **to seek help when needed and promote company- provided resources. Diversity, Equity and Inclusion At Cummins, we leverage the strength of our diverse, global workforce to drive innovation and deliver superior solutions for our customers and communities. We do this through our commitment to fostering** ~~and~~ - **an accountable culture that champions our vision of a workforce mirroring** ~~other~~ -- **the** ~~stakeholders~~ **diversity of the communities we serve** . ~~By partnering~~ **This commitment starts at the top** with ~~governments~~ **our Board** and **permeates throughout our organization as everyone plays a role in nurturing inclusive environments where all** ~~health care providers, we facilitated the delivery of over 45, 000 doses of approved vaccines to~~ employees **can reach** ~~at or near the~~ **their full potential** ~~workplace. This includes over 5, 000 shots in the U. S., over 30, 000 shots in India~~ and **thrive** ~~over 10, 000 shots in Mexico. Diversity, Equity and Inclusion Diversity, equity and inclusion at all levels of the company are critical to our ability to innovate, to win in the marketplace and to create sustainable success. Having diverse, accessible, equitable and inclusive workplaces allows us to attract and retain the best employees to deliver results for our shareholders~~ . This is exemplified by the composition of the Board **and Cummins Leadership Team. As** of ~~which 5~~ **January 31, 2024, five** of ~~13 directors~~ **twelve Board members** are ~~female~~ **women** and **three** ~~3 of 13 directors~~ are ethnically diverse. **Under the guidance** ~~In addition, 47 percent~~ of our **female Chair and CEO, the thirteen member Cummins** ~~leadership~~ **Leadership** ~~team~~ **Team includes five women and three Black members. Moreover, within our five business segments, four are led by women. Our CEO' s strong focus on cultivating an inclusive culture underscores our belief that diversity** is ~~female~~ **a powerful asset in maintaining our competitive edge. It is the responsibility of all employees to contribute to and advance our diversity, equity and** ~~including~~ - **inclusion** ~~our Chief Executive Officer~~ (~~CEO~~ **DE & I**) ~~. We disclose publicly the percentage of women in supervisory roles and the overall workforce. We also launched several~~ initiatives ~~to increase representation of minorities in the workplace~~ . **They are supported by our** ~~We created a Global Inclusion Leadership Council to oversee~~ more than ~~100~~ **150** employee ~~resource~~ **resources** groups around the world ~~to~~ **that** provide opportunities ~~to employees from all backgrounds~~ for ~~leadership training,~~ cross **-** cultural learning and professional development **,** ~~. We developed~~ and ~~piloted~~ **trainings such as one launched in 2023 focused on creating inclusion and belonging on teams by building awareness around different lived experiences. DE & I is also integral to the way we conduct ourselves as** a **corporate citizen** ~~diversity, equity and inclusion learning curriculum with a focus on awareness of privilege and unconscious bias~~. ~~In 2020, we launched~~ **Building upon the success of our employee- led** Cummins Advocating for Racial Equity ~~(CARE)~~, which seeks to ~~drive a sustainable impact in dismantling~~ **dismantle** institutional racism and ~~creating~~ **foster** systemic equity **, we announced** ~~. CARE now has hundreds of employees engaged and~~ - **an expansion of the program** ~~has deployed over $ 30 million in funding~~ to ~~fight racial injustice~~ **select Latino communities** in the U. S **. in the fall of 2023** . For more information on the topics above and our management of our human capital resources, please go to sustainability. cummins. com. Information from our sustainability report and sustainability webpage is not incorporated by reference into this filing. AVAILABLE INFORMATION We file annual, quarterly and current reports, proxy statements and other information electronically with the Securities and Exchange Commission (SEC). The SEC maintains an internet site that contains annual, quarterly and current reports, proxy and information statements and other information that Cummins files electronically with the SEC. The SEC' s internet site is www. sec. gov. Our internet site is www. cummins. com. You can access our Investors and Media webpage through our internet site, by ~~clicking~~ **hovering** on the heading" ~~About~~ **Company** " **and selecting** ~~followed by the~~ " ~~Cummins Inc.~~ Investor ~~Website~~ **Relations** " link **under the" About Us" section** . We make available, free of charge, on or through our Investors and Media webpage, our proxy statements, annual reports on Form 10- K, quarterly reports on Form 10- Q, current reports on Form 8- K and any amendments to those reports filed or furnished pursuant to the Securities Exchange Act of 1934 or the Securities Act of 1933, as amended, as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. We also have a Corporate Governance webpage. You can access our Governance Documents webpage through our internet site, www. cummins. com, by ~~clicking~~ **hovering** on the heading" **Company" and selecting" Investor Relations" link under the"** About **Us** " **section** ~~followed by" Cummins Inc~~ . ~~Investor Website"~~ **Next, click on** ~~then~~ - **the heading** " Board & ESG" and select" Governance Documents" from the drop- down menu. Code of Conduct, Committee Charters and other governance documents are included at this site. Our Code of Conduct applies to all employees, regardless of their position or the country in which they work. It also applies to the employees of any entity owned or controlled by us. We will post any amendments to the Code of Conduct and any waivers that are required to be disclosed by the rules of either the SEC or the ~~New York Stock Exchange LLC (~~NYSE ~~)~~, on our internet site. The information on our internet site is not incorporated by reference into this report. INFORMATION ABOUT OUR EXECUTIVE OFFICERS Following are the names and ages of our executive officers, their positions with us at January 31, ~~2023~~ **2024 ,** and summaries of their backgrounds and business experience: Name and Age Present Cummins Inc. position andyear appointed to position Principal position during the past five yearsother than Cummins Inc. position currently **heldJennifer Rumsey** ~~heldN. Thomas Linebarger~~ (~~60~~ **50**) ~~Chairman~~ --- **Chair** ~~of the Board of Directors and Executive Chairman (2022) Chairman of the Board of Directors~~ and Chief Executive Officer (~~2012~~ - **2023** ~~- 2022) Jennifer Rumsey (49~~) President and Chief Executive Officer (2022 **- 2023**) President and Chief Operating Officer (2021- 2022) Vice President and President — Components (2019- 2020) Vice President — Chief Technical Officer (2015- 2019) Sharon R. Barner (~~65~~ **66**) Vice President — Chief Administrative Officer **(2021) Vice President — Chief Administrative Officer** and Corporate Secretary (2021 **- 2023**) Vice President — General Counsel and Corporate Secretary (2020- 2021) Vice President — General Counsel (2012- 2020) Marvin Boakye (~~49~~ **50**) Vice President — Chief Human Resources Officer (2022) Chief People and Diversity Officer — Papa John' s International (2019- 2022) Chief People Officer — Papa John' s International (2019) Vice President, Human Resources — Andeavor (2017- 2019) Jenny M. Bush (~~48~~ **49**) Vice President and President — Power Systems (2022) Vice President — Cummins Sales & Service North America (2017- 2022) Amy R. Davis (~~53~~ **54**) Vice President and President — ~~New Power~~ **Accelera and Components (2023) Vice President and President — Accelera** (2020 **- 2023**) Vice President — Cummins Filtration (2018- 2020) **Bonnie Fetch** ~~General Manager — Filtration Business~~ (**53** ~~2015- 2018) Tracy A. Embree (49~~) Vice President and President — Distribution Business (**2024** ~~2019) Vice President and President — Components (2015- 2019) Bonnie Fetch (52~~) Vice President — Global Supply Chain and Manufacturing (2022 **- 2023**) Vice President — DBU Supply Chain Services (2020- 2022) Executive Director, Supply Chain — DBU (2018- 2020) ~~Walter J~~ **Nicole Y** . ~~Fier~~ **Lamb- Hale** (~~58~~ **57**) Vice President — Chief ~~Technical~~ **Legal** Officer **and Corporate Secretary** (~~2019) Vice President — Engineering, Engine Business (2015- 2019) Donald G. Jackson (53) Vice President — Treasury and Tax (2020~~ **2023** ~~) Vice President — Treasurer (2015- 2020) Nicole Y. Lamb- Hale (56~~) Vice President — Chief Legal Officer (2022 **- 2023**) Vice President — General Counsel (2021- 2022) Managing Director and Washington, DC City Leader — Kroll (2020- 2021) Managing Director — Kroll (2016- 2020) **Brett Merritt** ~~Mahesh M. Narang~~ (47) Vice President and President — ~~Components~~ **Engine Business** (~~2021~~ **2024**) Vice President **— On- Highway Engine Business** and **Vice President of Strategic Customer Relations (2023) Vice** President — ~~Cummins Emissions Solutions~~ **On- Highway Engine Business** (2017- ~~2021~~ **2023**) Srikanth Padmanabhan (~~58~~ **59) Executive Vice President and President — Operations (2024**) Vice President and President — Engine Business (2016 **-** ~~) Luther E. Peters (50) Vice President — Controller (2022~~ **2023** ~~) Vice President — Controller, Components (2017- 2022~~) Livingston L. Satterthwaite (~~62~~ **63**) Senior Vice President (2022) **Senior Vice President & Interim President — Distribution Business (2023)** Vice Chairman (2021- 2022) President and Chief Operating Officer (2019- 2021) Vice President and President — Distribution Business (2015- 2019) Mark A. Smith (~~55~~ **56**) Vice President — Chief Financial Officer (2019) Vice President — Financial Operations (2016- 2019) Nathan R. Stoner (~~45~~ **46**) Vice President — China ABO (2020) General Manager — Partnerships and EBU China Joint Venture Business (2018- 2020) ~~General Manager — Power Systems Business, China (2016- 2018)~~ Jeffrey T. Wiltrout (~~42~~ **43**) Vice President — Corporate Strategy (2022) Executive Director — Corporate Development (2021- 2022) Strategy Director — Power Systems Business Unit (2018- 2021) **Jonathan Wood** ~~Corporate Strategy Director~~ (**53) Vice President — Chief Technical Offer (2023) Vice**

President — New Power Engineering (~~2016~~ - **2021** - **2023) Vice President — Components Engineering (** 2018 **- 2021**) Our **Chair and** CEO is elected annually by the Board and holds office until the meeting of the Board at which her election is next considered. Other officers are appointed by the **Chair and** CEO, are ratified by the Board and hold office for such period as the **Chair and** CEO or the Board may prescribe. ITEM 1A. Risk Factors Set forth below and elsewhere in this Annual Report on Form 10- K are some of the principal risks and uncertainties that could cause our actual business results to differ materially from any forward- looking statements contained in this Report and could individually, or in combination, have a material adverse effect on our results of operations, financial position and cash flows. These risk factors should be considered in addition to our cautionary comments concerning forward- looking statements in this Report, including statements related to markets for our products and trends in our business that involve a number of risks and uncertainties. Our separate section above," CAUTIONARY STATEMENTS REGARDING FORWARD- LOOKING INFORMATION," should be considered in addition to the following statements. GOVERNMENT REGULATION ~~We are conducting~~ **While we have reached the Agreement in Principle with the EPA, CARB, DOJ and CA AG to resolve certain regulatory civil claims regarding our emissions certification and compliance process for certain engines primarily used in pick- up truck applications in the U. S. and recorded** a **charge** ~~formal internal review~~ of ~~our emission certification process~~ **$ 2. 036 billion in the fourth quarter of 2023 in connection with the Agreement in Principle, the Agreement in Principle remains subject to final regulatory** and **judicial approvals. In addition, we have incurred, and likely will incur, other additional claims, costs and expenses in connection with the matters covered by the Agreement in Principle and other matters related to our** compliance with emission standards **for our engines, including** with respect to **additional regulatory action** ~~our pick- up truck applications~~ and **collateral litigation related** ~~are working with the EPA and CARB~~ to ~~address their questions about~~ these ~~applications~~ **matters** . **Those** ~~Due to the continuing nature of our formal internal review~~ and **related expenses** ~~on- going discussions with the EPA~~ and **reputational damage** ~~CARB, we cannot predict the final results of this formal review and these regulatory processes, nor whether, or the extent to which, they~~ could have a material adverse impact on our results of operations **, financial condition** and cash flows. ~~We previously~~ **In December 2023, we** announced that we ~~are conducting~~ **reached the Agreement in Principle and recorded** a **charge** ~~formal internal review~~ of ~~our emissions certification process and compliance with emission standards with respect~~ **$ 2. 036 billion in the fourth quarter of 2023** to ~~all~~ **resolve the matters addressed by the Agreement in Principle involving approximately one million** of our pick- up truck applications **in** ~~, following conversations with~~ the ~~EPA and CARB regarding certification~~ **U. S. This charge was in addition to the previously announced charges** of ~~our engines~~ **$ 59 million** for ~~model year 2019 RAM 2500 and 3500 trucks. During conversations with the EPA and CARB about the effectiveness of our pick- up truck applications, the regulators raised concerns that certain aspects of our emissions systems may reduce the effectiveness of our emissions control systems and thereby act as defeat devices. As a result, our internal review focuses, in part, on the regulators' concerns. We are working closely with the regulators to enhance our emissions systems to improve the effectiveness of all of our pick- up truck applications and to fully address the regulators' requirements. Based on discussions with the regulators, we have developed a new calibration for the engines in model year 2019 RAM 2500 and 3500 trucks that has been included in all engines shipped since September 2019. During our ongoing discussions, the regulators turned their~~ -- **the** ~~attention to other model years and other engines, most notably our pick- up truck applications for RAM 2500 and 3500 trucks for model years 2013 through 2018 and Titan trucks for model years 2016 through 2019. We have also been in communication with Environmental and Climate Change Canada regarding similar issues relating to some of these very same platforms. In connection with these and other ongoing discussions with the EPA and CARB, we are developing a new software calibration and will recall~~ **recalls of** model years 2013 through 2018 RAM 2500 and 3500 trucks ~~. We accrued $ 30 million for the RAM recall during the first quarter of 2022, an~~ **and** ~~amount that reflected our current estimate of the cost of that recall. We are also developing a new software calibration and hardware fix and will recall~~ model years 2016 through 2019 Titan trucks. ~~We accrued $ 29 million~~ **Failure to comply with the terms and conditions of the Agreement in Principle will also subject us to further stipulated penalties. The Agreement in Principle remains subject to final regulatory and judicial approvals, and we cannot be certain that the Agreement in Principle will be approved, in its current** ~~for~~ **form , or at all. In connection with our announcement of our entry into** the ~~Titan recall during the~~ **Agreement in Principle, we have become subject to shareholder, consumer and** third ~~quarter of 2022,~~ **- party litigation regarding the matters covered by the Agreement in Principle** ~~an~~ **and we may become subject** ~~amount that reflected our current estimate of the cost of that recall. We will continue~~ to ~~work together closely~~ **additional litigation in connection** with ~~the relevant regulators to develop and implement recommendations for improvement and seek to reach further resolutions as part of our ongoing commitment to compliance. Due to the presence of many unknown facts and circumstances, we are not yet able to estimate any further financial impact of~~ these matters. **The** ~~It is possible that the~~ consequences resulting from ~~our formal review and these~~ -- **the** ~~regulatory processes~~ **resolution of the foregoing matters are uncertain and the related expenses and reputational damage** could have a material adverse impact on our results of operations **, financial condition** and cash flows **. See NOTE 15," COMMITMENTS AND CONTINGENCIES," to the Consolidated Financial Statements for additional information** . Our products are subject to extensive statutory and regulatory requirements that can significantly increase our costs and, along with increased scrutiny from regulatory agencies and unpredictability in the adoption, implementation and enforcement of increasingly stringent and fragmented emission standards by multiple jurisdictions around the world, could have a material adverse impact on our results of operations, financial condition and cash flows. Our engines are subject to extensive statutory and regulatory requirements governing emissions and noise, including standards imposed by the EPA, the EU, state regulatory agencies (such as the CARB) and other regulatory agencies around the world. Regulatory agencies are making certification and compliance with emissions and noise standards more stringent and subjecting diesel engine products to an increasing level of scrutiny **. In addition, failure to comply with the terms and conditions of the Agreement in Principle will subject us to stipulated penalties** . The discovery of noncompliance issues could have a material adverse impact on our results of operations, financial condition and cash flows. Developing engines and components to meet more stringent and changing regulatory requirements, with different implementation timelines and emission requirements, makes developing engines efficiently for multiple markets complicated and could result in substantial additional costs that may be difficult to recover in certain markets. While we have met previous deadlines, our ability to comply with existing and future regulatory standards will be essential for us to maintain our competitive position in the engine applications and industries we serve. The successful development and introduction of new and enhanced products in order to comply with new regulatory requirements are subject to other risks, such as delays in product development, cost over- runs and unanticipated technical and manufacturing difficulties. In addition to these risks, the nature and timing of government implementation and enforcement of increasingly stringent emission standards in our worldwide markets are unpredictable and subject to change. Any delays in implementation or enforcement could result in a loss of our competitive advantage and could have a material adverse impact on our results of operations, financial condition and cash flows. We operate our business on a global...... laws might be administered or interpreted. Evolving environmental and climate change legislation and regulatory initiatives may adversely impact our operations, could impact the competitive landscape within our markets and could negatively affect demand for our products. Our ~~plants and~~ operations are subject to increasingly stringent environmental laws and regulations in all of the countries in which we operate, including laws and regulations governing air emission, **carbon content,** discharges to water and the generation, handling, storage, transportation, treatment and disposal of waste materials **. For example, in October 2023, the EPA published a final rule imposing reporting and recordkeeping requirements on manufacturers and importers of per- and polyfluoroalkyl substances (PFAS)** . While we believe that we are in compliance in all material respects with these environmental laws and regulations, there can be no assurance that we will not be adversely impacted by costs, liabilities or claims with respect to existing or subsequently acquired operations, under either present laws and regulations or those that may be adopted or imposed in the future. We are also subject to laws requiring the cleanup of contaminated property. If a release of hazardous substances occurs at or from any of our current or former properties or at a landfill or another location where we have disposed of hazardous materials, we may be held liable for the contamination and the amount of such liability could be material. **We may become subject to additional evolving regulations related to the cleanup of contaminated property, such as the EPA' s proposal to designate two widely used PFAS as hazardous substances.** Concern over climate change has resulted in, and could continue to result in, new legal or regulatory requirements designed to reduce or mitigate the effects of ~~greenhouse gas (~~ GHG ~~)~~ emissions. We may become subject to **further** additional legislation, regulations or accords regarding climate change, and compliance with ~~any~~ new rules could be difficult and costly, including increased capital expenditures. Our failure to successfully comply with any such legislation, regulation or accord could also impact our ability to compete in our markets and decrease demand for our products **We operate our business** on a global basis and changes in international,national and regional trade laws,regulations and policies affecting and / or restricting international trade could adversely impact the demand for our products and our competitive position.We manufacture,sell and service products globally and rely upon a global supply chain to deliver the raw materials,components,systems and parts that we need to manufacture and service our products.Changes in laws,regulations and government policies on foreign trade and investment can affect the demand for our products and services,cause non- U.S.customers to shift preferences toward domestically manufactured or branded products and impact the competitive position of our products or prevent us from being able to sell products in certain countries.Our business benefits from free trade agreements,such as the United States- Mexico- Canada Agreement and the U.S.trade relationship with China,Brazil and France and efforts to withdraw from,or substantially modify such agreements or arrangements,in addition to the implementation of more restrictive trade policies,such as more detailed inspections,higher tariffs (including,but not limited to,additional tariffs on the import of steel or aluminum and imposition of new or retaliatory tariffs against certain countries,including based on developments in U.S.and China relations),import or export licensing requirements and exchange controls or new barriers to entry,could limit our ability to capitalize on current and future growth opportunities in international markets,impair our ability to expand the business by offering new technologies,products and services,and could adversely impact our production costs,customer demand and our relationships with customers and suppliers.Any of these consequences could have a material adverse effect on our results of operations,financial condition and cash flows.Embargoes,sanctions and export controls imposed by the U.S.and other governments restricting or prohibiting transactions with certain persons or entities,including financial institutions,to certain countries or regions,or involving certain products,limit the sales of our products.Embargoes,sanctions and export control laws are changing rapidly for certain geographies,including with respect to China.In particular,changing U.S.export controls and sanctions on China,as well as other restrictions affecting transactions involving China and Chinese parties,could affect our ability to collect receivables, ~~access cash generated in China,~~ provide aftermarket and warranty support for our products,sell products and otherwise impact our reputation and business,any of which could have a material adverse effect on our results of operations,financial condition and cash flows.Unanticipated changes in our effective tax rate,the adoption of new tax legislation or exposure to additional income tax liabilities could adversely affect our profitability.We are subject to income taxes in the U.S.and numerous international jurisdictions.Our income tax provision and cash tax liability in the future could be adversely affected by the adoption of new tax legislation,changes in earnings in countries with differing statutory tax rates,changes in the valuation of deferred tax assets and liabilities and the discovery of new information in the course of our tax return preparation process.The carrying value of deferred tax assets,which are predominantly in the U.S.,is dependent on our ability to generate future taxable income in the U.S.We are also subject to ongoing tax audits.These audits can involve complex issues,which may require an extended period of time to resolve and can be highly judgmental.Tax authorities may disagree with certain tax reporting positions taken by us and,as a result,assess additional taxes against us.We regularly assess the likely outcomes of these audits in order to determine the appropriateness of our tax provision.The amounts ultimately paid upon resolution of these or subsequent tax audits could be materially different from the amounts previously included in our income tax provision and,therefore,could have a material impact on our tax provision.Our global operations are subject to laws and regulations that impose significant compliance costs and create reputational and legal risk.Due to the international scope of our operations,we are subject to a complex system of commercial and trade regulations around the world.Recent years have seen an increase in the development and enforcement of laws regarding trade compliance and anti- corruption,such as the U.S.Foreign Corrupt Practices Act and similar laws from other countries,as well as new regulatory requirements regarding data privacy,such as the European Union General Data Protection Regulation.Our numerous foreign subsidiaries,affiliates and joint venture partners are governed by laws,rules and business practices that differ from those of the U.S.The activities of these entities may not comply with U.S.laws or business practices or our Code of Business Conduct.Violations of these laws may result in severe criminal or civil sanctions,could disrupt our business and result in an adverse effect on our reputation,business and results of operations,financial condition and cash flows.We cannot predict the nature,scope or effect of future regulatory requirements to which our operations might be subject or the manner in which existing laws might be administered or **interpreted.** . Future bans or limitations on the use of diesel- powered vehicles or other applications could have a material adverse impact on our business over the long term. In an effort to limit GHG emissions and combat climate change, multiple countries and cities have announced that they plan to implement a ban on the use in their countries or cities of diesel- powered products in the near or distant future. These countries include China, India and Germany. In addition, California government officials have called for the state to phase out sales of certain diesel- powered vehicles by 2035. To the extent that these types of bans are actually implemented in the future on a broad basis, or in one or more of our key markets, our diesel business over the long- term could experience material adverse impacts. BUSINESS CONDITIONS / DISRUPTIONS We may fail to successfully integrate the acquisition of Meritor and / or fail to fully realize all of the anticipated benefits, including enhanced revenue, earnings and cash flow from our acquisition which could have a material adverse impact on our results of operations, financial condition and cash flows. The acquisition of Meritor ~~will involve~~ **involves** the integration of Meritor' s operations with our existing operations, and there are uncertainties inherent in such an integration. We **have, and** will be **continued to be** required to **,** devote significant management attention and resources to integrating Meritor' s operations. Our ability to fully realize all of the anticipated benefits, including enhanced revenue, earnings and cash flow, from our acquisition of Meritor will depend, in substantial part, on our ability to successfully integrate the products into our segments, launch the Meritor products around the world and achieve our projected sales goals. While we believe we will ultimately achieve these objectives, it is possible that we will be unable to achieve some or all of these objectives within our anticipated time frame or in the anticipated amounts. If we are not able to successfully complete the integration of the Meritor business or implement our Meritor strategy, we may not fully realize the anticipated benefits, including enhanced revenue, earnings and cash flows, from this acquisition or such anticipated benefits may take longer to realize than expected. As part of the purchase accounting associated with the acquisition, significant goodwill and intangible asset balances were recorded on the consolidated balance sheet. If cash flows from the acquisition fall short of our anticipated amounts, these assets could be subject to non- cash impairment charges, negatively impacting our earnings. Failure to successfully integrate Meritor and / or realize the anticipated benefits could have a material adverse impact on our results of operations, financial condition and cash flows. We are vulnerable to raw material, transportation and labor price fluctuations and supply shortages, which impacted and could continue to impact our results of operations, financial condition and cash flows. We are experiencing supply chain disruptions and related challenges throughout the supply chain. We single source a number of parts and raw materials critical to our business operations. Any delay in our suppliers' deliveries may adversely affect our operations at multiple manufacturing locations, forcing us to seek alternative supply sources to avoid serious disruptions. Delays may be caused by factors affecting our suppliers (including, but not limited to, raw material availability, capacity constraints, port congestion, labor disputes or unrest, shortages of labor, economic downturns, availability of credit, impaired financial condition, sanctions / tariffs, pandemic restrictions, energy inflation / availability, suppliers' allocations to other purchasers, weather emergencies, natural disasters, acts of government or acts of war or terrorism). The effects of climate change, including extreme weather events, long- term changes in temperature levels and water availability may exacerbate these risks. Any extended delay in receiving critical supplies could impair our ability to deliver products to our customers and have a material adverse effect on our results of operations, financial condition and cash flows. In addition, the current economic environment has resulted, and may continue to result, in price volatility and increased levels of inflation of many of our raw material, transportation and other costs. In particular, increased levels of inflation, rising interest rates and concerns regarding a potential economic recession may result in increased operating costs and / or decreased levels of profitability. Further, the labor market for skilled manufacturing remains tight, and our labor costs have increased as a result. Material, transportation, labor and other cost inflation has impacted and could continue to impact our results of operations, financial condition and cash flows ~~. The ongoing conflict between Russia and Ukraine, and the global response (including government bans or restrictions on doing business in Russia), could have a material adverse impact on our results of operations, financial condition and cash flows. Given the nature of our business and our global operations, political, economic, and other conditions in foreign countries and regions, including geopolitical risks such as the current conflict between Russia and Ukraine, may adversely affect our results of operations, financial condition and cash flows. We suspended our commercial operations in Russia indefinitely, which resulted in a charge of $ 111 million during 2022 related to these actions. As of December 31, 2022, we had no inventory and approximately $ 14 million of receivables in Russia, all of which are fully reserved. In addition, we have cash balances of $ 66 million, some of which will be used to fund ongoing employee, tax and contract settlement obligations. We may incur additional charges as conditions continue to evolve including with respect to our planned extrication from our relationship with KAMAZ Publicly Traded Company and its subsidiaries, including the unconsolidated joint venture. In addition, we have experienced, and expect to continue to experience, an inability to collect customer receivables and may be the subject of litigation in connection with our suspension of commercial operations in Russia. The broader consequences of this conflict, which may include further sanctions, embargoes, regional instability, and geopolitical shifts; potential retaliatory action by the Russian government against companies, including possible nationalization of foreign businesses in Russia; increased tensions between the United States and~~

~~countries in which we operate; and the extent of the conflict' s effect on our business and results of operations as well as the global economy, cannot be predicted. To the extent the current conflict between Russia and Ukraine adversely affects our business, it may also have the effect of heightening many other risks, any of which could materially and adversely affect our business and results of operations. Such risks include, but are not limited to, adverse effects on macroeconomic conditions, including inflation, particularly with regard to raw material, transportation and labor price fluctuations; disruptions to our information technology environment, including through cyberattack, ransom attack, or cyber- intrusion; adverse changes in international trade policies and relations; disruptions in global supply chains; and our exposure to foreign currency exchange rate changes~~ . We face the challenge of accurately aligning our capacity with our demand. Our markets are cyclical in nature and we face periods when demand fluctuates significantly higher or lower than our normal operating levels, including variability driven by supply chain inconsistency. Accurately forecasting our expected volumes and appropriately adjusting our capacity are important factors in determining our results of operations and cash flows. We manage our capacity by adjusting our manufacturing workforce, capital expenditures and purchases from suppliers. In periods of weak demand, we may face under-utilized capacity and un- recovered overhead costs, while in periods of strong demand we may experience unplanned costs and could fail to meet customer demand. We cannot guarantee that we will be able to adequately adjust our manufacturing capacity in response to significant changes in customer demand, which could harm our business. If we do not accurately align our manufacturing capabilities with demand it could have a material adverse effect on our results of operations, financial condition and cash flows. We derive significant earnings from investees that we do not directly control, with more than 50 percent of these earnings from our China- based investees. For ~~2022~~ **2023** , we recognized $ ~~349~~ **483** million of equity, royalty and interest income from investees, compared to $ ~~506~~ **349** million in ~~2021~~ **2022** . Approximately one third of our equity, royalty and interest income from investees is from three of our 50 percent owned joint ventures in China- Beijing Foton Cummins Engine Co., Ltd., Dongfeng Cummins Engine Company, Ltd. and Chongqing Cummins Engine Company, Ltd. Although a significant percentage of our net income is derived from these unconsolidated entities, we do not unilaterally control their management or their operations, which puts a substantial portion of our net income at risk from the actions or inactions of these entities. A significant reduction in the level of contribution by these entities to our net income would likely have a material adverse effect on our results of operations and cash flows. Our truck manufacturers and OEM customers discontinuing outsourcing their engine supply needs, experiencing financial distress or experiencing a change- in- control of one of our large truck OEM customers, could have a material adverse impact on our results of operations, financial condition and cash flows. We recognize significant sales of engines and components to a few large on- highway truck OEM customers which have been an integral part of our positive business results for several years. Many are truck manufacturers or OEMs that manufacture engines for some of their own vehicles. Despite their own engine manufacturing abilities, these customers have historically chosen to outsource certain types of engine production to us due to the quality of our engine products, our emission compliance capabilities, our systems integration, their customers' preferences, their desire for cost reductions, their desire for eliminating production risks and their desire to maintain company focus. However, there can be no assurance that these customers will continue to outsource, or outsource as much of, their engine production in the future. In addition, increased levels of OEM vertical integration could result from a number of factors, such as shifts in our customers' business strategies, acquisition by a customer of another engine manufacturer, the inability of third- party suppliers to meet product specifications and the emergence of low- cost production opportunities in foreign countries. Any significant reduction in the level of engine production outsourcing from our truck manufacturer or OEM customers, financial distress of one of our large truck OEM customers due to a change- in- control, could likely lead to significant reductions in our sales volumes, commercial disputes, receivable collection issues, and other negative consequences that could have a material adverse impact on our results of operations, financial condition and cash flows. PRODUCTS AND TECHNOLOGY Our products are subject to recall for performance or safety- related issues. Our products are subject to recall for performance or safety- related issues. Product recalls subject us to reputational risk, loss of current and future customers, reduced revenue and product recall costs. Product recall costs are incurred when we decide, either voluntarily or involuntarily, to recall a product through a formal campaign to solicit the return of specific products due to known or suspected performance or safety issues. Any significant product recalls could have material adverse effects on our results of operations, financial condition and cash flows. See NOTE 14," PRODUCT WARRANTY LIABILITY" to the Consolidated Financial Statements for additional information. Our products are exposed to variability in material and commodity costs. Our businesses establish prices with our customers in accordance with contractual time frames; however, the timing of material and commodity market price increases may prevent us from passing these additional costs on to our customers through timely pricing actions. Additionally, higher material and commodity costs around the world as well as elevated levels of inflation may offset our efforts to reduce our cost structure. While we customarily enter into financial transactions and contractual pricing adjustment provisions with our customers that attempt to address some of these risks, there can be no assurance that commodity price fluctuations will not adversely affect our results of operations and cash flows. While the use of commodity price hedging instruments and contractual pricing adjustments may provide us with some protection from adverse fluctuations in commodity prices, by utilizing these instruments, we potentially forego the benefits that might result from favorable fluctuations in price. As a result, higher material and commodity costs, could result in declining margins. The development of new technologies may materially reduce the demand for our current products and services. We are investing in new products and technologies, including electrified powertrains, hydrogen production and fuel cells, for planned introduction into certain new and existing markets. Given the early stages of development of some of these new products and technologies, there can be no guarantee of the future market acceptance and investment returns with respect to our planned products, which will face competition from an array of other technologies and manufacturers. The ongoing energy transition away from fossil fuels and the increased adoption of electrified powertrains in some market segments could result in lower demand for current diesel or natural gas engines and components and, over time, reduce the demand for related parts and service revenues from diesel or natural gas powertrains.

Furthermore, it is possible that we may not be successful in developing segment- leading electrified or alternate fuel powertrains and some of our existing customers could choose to develop their own, or source from other manufacturers, and any of these factors could have a material adverse impact on our results of operations, financial condition and cash flows. Lower- than- anticipated market acceptance of our new or existing products or services could have a material adverse impact on our results of operations, financial condition and cash flows. Although we conduct market research before launching new or refreshed engines and introducing new services, many factors both within and outside our control affect the success of new or existing products and services in the marketplace. Offering engines and services that customers desire and value can mitigate the risks of increasing competition and declining demand, but products and services that are perceived to be less than desirable (whether in terms of price, quality, overall value, fuel efficiency or other attributes) can exacerbate these risks. With increased consumer interconnectedness through the internet, social media and other media, mere allegations relating to poor quality, safety, fuel efficiency, corporate responsibility or other key attributes can negatively impact our reputation or market acceptance of our products or services, even if such allegations prove to be inaccurate or unfounded. Our business is exposed to potential product liability claims. We face an inherent business risk of exposure to product liability claims in the event that our products' failure to perform to specification results, or is alleged to result, in property damage, bodily injury and / or death. At any given time, we are subject to various and multiple product liability claims, any one of which, if decided adversely to us, may have a material adverse effect on our reported results of operation in the period in which our liability with respect to any such claim is recognized. While we maintain insurance coverage with respect to certain product liability claims, we may not be able to obtain such insurance on acceptable terms in the future, if at all, and any such insurance may not provide adequate coverage against product liability claims. In addition, product liability claims can be expensive to defend and can divert the attention of management and other personnel for significant periods of time, regardless of the ultimate outcome. Furthermore, even if we are successful in defending against a claim relating to our products, claims of this nature could cause our customers to lose confidence in our products and us. GENERAL We may not **realize the anticipated value or tax treatment for the anticipated full divestiture of our interest in Atmus Filtration Technologies Inc. (Atmus). There are uncertainties and risks related to the timing and potential value to Cummins, Atmus and our respective shareholders of the planned divestiture of Atmus, including business, industry and market risks, as well as risks involving realizing the anticipated favorable tax treatment of the divestiture if there is a significant delay or failure to** complete the **divestiture. Failure to implement** ~~separation of our filtration business within~~ the ~~time frame we anticipate~~ **divestiture effectively could result in a lower value to Cummins, Atmus and our respective shareholders. A delay** or **failure to complete the divestiture** ~~at all. The separation may present difficulties that~~ could ~~have an adverse effect on us and / or the independent business resulting~~ --- **result** ~~from the separation and / or costs associated with the separation may be higher than anticipated. Additionally, if we complete the separation, we may not realize some or all of the expected benefits of the separation. In August 2021, we announced our exploration of strategic alternatives for our filtration business unit, including the potential separation of the business into a stand- alone company (the " separation "). Any separation would be complex~~ in ~~nature, and unanticipated developments or changes, including changes in law, the macroeconomic environment and market conditions or regulatory or political conditions may affect our ability to complete the separation, within the anticipated time frame or at all. Whether or not the separation is completed,~~ our businesses **facing** ~~may face~~ material challenges in connection with this transaction, including, without limitation: • the diversion of management' s attention from ongoing business concerns and impact on our businesses as a result of the devotion of management' s attention to strategic alternatives for the **Atmus divestiture** ~~filtration business, including the separation~~ ; • maintaining employee morale and retaining key management and other employees; • retaining existing business and operational relationships, including with customers, suppliers, employees and other counterparties, and attracting new business and operational relationships; ~~• execution~~ and ~~related risks in connection with financing transactions undertaken in connection with the separation;~~ • foreseen and unforeseen dis- synergy costs, costs of restructuring transactions (including taxes) and other significant costs and expenses ~~; and • any potential negative reactions from the financial markets resulting from the separation~~ . Any of these factors could have a material adverse effect on ~~our~~ **each of Cummins' and Atmus' s respective** business, financial condition, results of operations and cash flows. In addition, if the ~~separation~~ **divestiture** is completed, the new independent company will incur ongoing costs, including costs of operating as an independent company, that the ~~separated~~ **divested** business will no longer be able to share . Those costs may exceed our estimates...... operations, financial condition and cash flows . We may be adversely impacted by the effects of climate change and may incur increased costs and experience other impacts due to new or more stringent climate change regulations, accords, mitigation efforts, GHG regulations or other legislation designed to address climate change. The scientific consensus indicates that emissions of GHG continue to alter the composition of Earth' s atmosphere in ways that are affecting, and are expected to continue to affect, the global climate. The potential impacts of climate change on our customers, product offerings, operations, facilities and suppliers are accelerating and uncertain, as they will be particular to local and customer- specific circumstances. These potential impacts may include, among other items, physical long- term changes in freshwater availability and the frequency and severity of weather events as well as customer product changes either through preference or regulation. Concerns regarding climate change may lead to additional international, national, regional and local legislative and regulatory responses, accords and mitigation efforts. Various stakeholders, including legislators and regulators, shareholders and non- governmental organizations, are continuing to look for ways to reduce GHG emissions, and consumers are increasingly demanding products and services resulting in lower GHG emissions. We could face risks to our brand reputation, investor confidence and market share due to an inability to innovate and develop new products that decrease GHG emissions. Increased input costs, such as fuel, utility, transportation and compliance- related costs could increase our operating costs and negatively impact customer operations and demand for our products. As the impact of any **additional** future climate related legislative or regulatory requirements on our global businesses and products is dependent on the timing, scope and design of the mandates or standards, we are currently unable to predict its potential impact which could have a material adverse effect on our results of operations, financial condition and cash flows. Climate change may exacerbate the frequency and intensity of natural disasters and adverse weather conditions, which may cause disruptions to our operations, including disrupting manufacturing, distribution and our supply chain. Our **.Those costs may exceed our estimates or could diminish the benefits we expect to realize from the separation.Our** plan to reposition our portfolio of product offerings through exploration of strategic acquisitions and divestitures may expose us to additional costs and risks.Part of our strategic plan is to improve our revenue growth,gross margins and earnings by exploring the repositioning of our portfolio of product line offerings through the pursuit of potential strategic acquisitions and / or divestitures to provide future strategic,financial and operational benefits and improve shareholder value.There can be no assurance that we will be able to identify suitable candidates or consummate these transactions on favorable terms.The successful identification and completion of any strategic transaction depends on a number of factors that are not entirely within our control,including the availability of suitable candidates and our ability to negotiate terms acceptable to all parties involved,conclude satisfactory agreements and obtain all necessary regulatory approvals.Accordingly,we may not be able to successfully negotiate and complete specific transactions.The exploration,negotiation and consummation of strategic transactions may involve significant expenditures by us,which may adversely affect our results of operations at the time such expenses are incurred,and may divert management' s attention from our existing business.Strategic transactions also may have adverse effects on our existing business relationships with suppliers and customers.If required,the financing for strategic acquisitions could result in an increase in our indebtedness,dilute the interests of our shareholders or both.Any acquisition may not be accretive to us for a significant period of time following the completion of such acquisition.Also,our ability to effectively integrate any potential acquisition into our existing business and culture may not be successful,which could jeopardize future financial and operational performance for the combined businesses.In addition,if an acquisition results in any additional goodwill or increase in other intangible assets on our balance sheet and subsequently becomes impaired,we would be required to record a non- cash impairment charge,which could result in a material adverse effect on our financial condition.Similarly,any strategic divestiture of a product line or business may reduce our revenue and earnings,reduce the diversity of our business,result in substantial costs and expenses and cause disruption to our employees,customers,vendors and communities in which we operate.Our business and operations are subject to interest rate risks and changes in interest rates can reduce demand for our products and increase borrowing costs **.** ~~and result in non- cash charges~~ Rising interest rates could have a dampening effect on overall economic activity and / or the financial condition of our customers,either or both of which could negatively affect customer demand for our products and our customers' ability to repay obligations to us.Rising interest rates may increase our cost of capital which could have material adverse effects on our financial condition and cash flows ~~.Rising interest rates could also impact certain goodwill assets requiring non- cash impairment charges which could have a material adverse impact on our earnings~~ .We operate in challenging markets for talent and may fail to attract,develop and retain key personnel.We depend on the skills,institutional knowledge,working relationships,and continued services and contributions of key personnel,including our leadership team and others at all levels of the company,as a critical part of our human capital resources.In addition,our ability to achieve our operating and strategic goals depends on our ability to identify,hire,train and retain qualified individuals.We compete with other companies both within and outside of our industry for talented personnel in a highly competitive labor market,and we may lose key personnel or fail to attract other talented personnel.Any such loss or failure could have material adverse effects **on our results of operations,financial condition and cash flows** information technology environment and our products are exposed to potential security breaches or other disruptions which may adversely impact our competitive position, reputation, results of operations, financial condition and cash flows. We rely on the capacity, reliability and security of our information technology environment and data security infrastructure in connection with various aspects of our business activities. We also rely on our ability to expand and continually update these technologies and related infrastructure in response to the changing needs of our business. As we implement new technologies, they may not perform as expected. We face the challenge of supporting our older technologies and implementing necessary upgrades. In addition, some of these technologies are managed by third- party service providers and are not under our direct control. If we experience a problem with an important technology, including during upgrades and / or new implementations of technologies, the resulting disruptions could have an adverse effect on our business and reputation. As customers adopt and rely on cloud- based digital technologies and services we offer, any disruption of the confidentiality, integrity or availability of those services could have an adverse effect on our business and reputation. The data handled by our technologies is vulnerable to security threats. Our operations routinely involve receiving, storing, processing and transmitting sensitive information pertaining to our business, customers, dealers, suppliers, employees and other sensitive matters. **As such,** ~~While we continually work to safeguard~~ our information technology environment **faces** ~~and mitigate potential risks, there is no assurance that these actions will be sufficient to prevent~~ information technology security threats, such as security breaches, computer malware, ransomware attacks and other" cyber attacks," which are increasing in both frequency and sophistication, along with power outages or hardware failures. These threats could result in unauthorized public disclosures of information, create financial liability, subject us to legal or regulatory sanctions, disrupt our ability to conduct our business, result in the loss of intellectual property or damage our reputation with customers, dealers, suppliers and other stakeholders. As the result of changing market conditions, a large percentage of our salaried employees continue to work remotely full or part-time. This remote working environment may pose a heightened risk for security breaches or other disruptions of our information technology environment. In addition, our products, including our engines, contain interconnected and increasingly complex technologies that control various processes and these technologies are potentially subject to" cyber attacks" and disruption. The impact of a significant information technology event on either our information technology environment or our products could have a material adverse effect on our competitive position, reputation, results of operations, financial condition and cash flows. We are exposed to political, economic and other risks that arise from operating a multinational business. Greater political, economic and social uncertainty and the evolving globalization of businesses could significantly change the dynamics of our competition, customer base and product offerings and impact our growth globally. Our business is subject to the political, economic and other risks that are inherent in operating in numerous countries. These risks include: • public health crises, including the spread of a contagious disease, such as future pandemics or epidemics, quarantines or shutdowns related to public health crises, and other catastrophic events; • economic and political instability, including international conflicts, war, acts of terrorism or the threat thereof, political or labor unrest, civil unrest, riots or insurrections; • the difficulty of enforcing agreements and collecting receivables through foreign legal systems; • trade protection measures and import or export licensing requirements; • the imposition of taxes on foreign income and tax rates in certain foreign countries that exceed those in the U. S.; • the imposition of tariffs, exchange controls or other restrictions; • difficulty in staffing and managing widespread operations and the application of foreign labor regulations; • required compliance with a variety of foreign laws and regulations; and • changes in general economic and political conditions, including changes in relationship with the U. S., in countries where we operate, particularly in China and emerging markets. As we continue to operate and grow our business globally, our success will depend, in part, on our ability to anticipate and effectively manage these and other related risks. There can be no assurance that the consequences of these and other factors relating to our multinational operations will not have a material adverse effect upon us. In addition, there continues to be significant uncertainty about the future relationships between the U. S. and China, including with respect to trade policies, treaties, government regulations and tariffs. Any increased trade barriers or restrictions on global trade, especially trade with China could adversely impact our competitive position, results of operations, financial condition and cash flows. We face significant competition in the regions we serve. The markets in which we operate are highly competitive. We compete worldwide with a number of other manufacturers and distributors that produce and sell similar products. We primarily compete with diesel engines and related diesel products; however, new technologies continue to be developed for gasoline, natural gas, hydrogen, electrification and other technologies, and we will continue to face new competition from these expanding technologies. Our products primarily compete on the basis of performance, price, total cost of ownership, fuel economy, emissions compliance, speed of delivery, quality and customer support. We also face competitors in some emerging regions who have established local practices and long standing relationships with participants in these markets. Additionally, we face increasing competition to develop innovative products that result in lower emissions. There can be no assurance that our products will be able to compete successfully with the products of other companies and in other markets. Increasing global competition among our customers may affect our existing customer relationships and restrict our ability to benefit from some of our customers' growth. As our customers in emerging markets continue to grow in size and scope, they are increasingly seeking to export their products to other countries. This has meant greater demand for our advanced engine technologies to help these customers meet the more stringent emissions requirements of developed markets, as well as greater demand for access to our distribution systems for purposes of equipment servicing. As these emerging market customers enter into, and begin to compete in more developed markets, they may increasingly begin to compete with our existing customers in these markets. Our further aid to emerging market customers could adversely affect our relationships with developed market customers. In addition, to the extent the competition does not correspond to overall growth in demand, we may see little or no benefit from this type of expansion by our emerging market customers. Failure to meet environmental, social and governance (ESG) expectations or standards, or to achieve our ESG goals, could adversely affect our business, results of operations and financial condition. In recent years, there has been an increased focus from stakeholders on ESG matters, including GHG emissions and climate- related risks, renewable energy, water stewardship, waste management, diversity, equity and inclusion, responsible sourcing and supply chain, human rights and social responsibility. Given our commitment to certain ESG principles, we actively manage these issues and have established and publicly announced certain goals, commitments and targets which we may refine, or even expand further, in the future. These goals, commitments and targets reflect our current plans and aspirations and are not guarantees that we will be able to achieve them. Evolving stakeholder expectations and our efforts to manage these issues, report on them and accomplish our goals present numerous operational, regulatory, reputational, financial, legal and other risks, any of which could have a material adverse impact, including on our reputation. Such risks and uncertainties include: • reputational harm, including damage to our relationships with customers, suppliers, investors, governments or other stakeholders; • adverse impacts on our ability to sell and manufacture products; • the success of our collaborations with third parties; • increased risk of litigation, investigations or regulatory enforcement ~~action~~ **actions** ; • unfavorable ESG ratings or investor sentiment; • diversion of resources and increased costs to control, assess and report on ESG metrics; • our ability to achieve our goals, commitments and targets within the timeframes announced; • access to and increased cost of capital and • adverse impacts on our stock price. Any failure, or perceived failure, to meet evolving stakeholder expectations and industry standards or achieve our ESG goals, commitments and targets could have a material adverse effect on our business, results of operations and financial condition. We may be adversely impacted by work stoppages and other labor matters. At December 31, ~~2022~~ **2023** , we employed approximately ~~73~~ **75** , ~~600~~ **500** persons worldwide. Approximately ~~23~~ **21** , ~~400~~ **900** of our employees worldwide were represented by various unions under collective bargaining agreements that expire between ~~2023~~ **2024** and ~~2027~~ **2028** . While we have no reason to believe that we will be materially impacted by work stoppages or other labor matters, there can be no assurance that future issues with our labor unions will be resolved favorably or that we will not encounter future strikes, work stoppages, or other types of conflicts with labor unions or our employees. Any of these consequences may have an adverse effect on us or may limit our flexibility in dealing with our workforce. In addition, many of our customers and suppliers have unionized work forces. Work stoppages or slowdowns experienced by us, our customers or suppliers could result in slowdowns or closures that would have a material adverse effect on our results of operations, financial condition and cash flow. We are subject to foreign currency exchange rate and other related risks. We conduct operations in many areas of the world involving transactions denominated in a variety of currencies. We are subject to foreign currency exchange rate risk to the extent that our costs are denominated in currencies other than those in which we earn revenues. In addition, since our financial statements are denominated in U. S. dollars, changes in foreign currency exchange rates between the U. S. dollar and other currencies have had, and will continue to have, an impact on our results of operations, financial condition and cash flows. We also face risks arising from the imposition of foreign exchange controls and currency devaluations. Foreign exchange controls may limit our ability to convert foreign currencies into U. S. dollars or to remit dividends and other payments by our foreign subsidiaries or businesses located in or conducted within a country imposing controls. Currency devaluations result in a diminished value of funds denominated in the currency of the country instituting the devaluation. See Management' s Discussion and Analysis for additional information. Significant declines in future financial and stock market conditions could diminish our pension plan asset performance and adversely impact our results of operations, financial condition and cash flow. We sponsor both funded and unfunded domestic and foreign defined benefit pension and other retirement plans. Our pension cost and the required contributions to our pension plans are directly affected by the value of plan assets, the projected and actual rates of return on plan assets and the actuarial assumptions we use to measure our defined benefit pension plan obligations, including the discount rate at which future projected and accumulated pension obligations are discounted to a present value. We could experience increased pension cost due to a combination of factors, including the decreased investment performance of pension plan assets, decreases in the discount rate and changes in our assumptions relating to the expected return on plan assets. Significant declines in current and future financial and stock market conditions could cause material losses in our pension plan assets, which could result in increased pension cost in future years and adversely impact our results of operations, financial condition and cash flow. Depending upon the severity and length of market declines and government regulatory changes, we may be legally obligated to make pension payments in the U. S. and perhaps other countries and these contributions could be material. We are exposed to risks arising from the price and availability of energy. The level of demand for our products and services is influenced in multiple ways by the price and availability of energy. High energy costs generally drive greater demand for better fuel economy in almost all countries in which we operate. Some of our engine products have been developed with a primary purpose of offering fuel economy improvements, and if energy costs decrease or increase less than expected, demand for these products may likewise decrease. The relative unavailability of electricity in some emerging market countries also influences demand for our electricity generating products, such as our diesel generators. If these countries add energy capacity by expanding their power grids at a rate equal to or faster than the growth in demand for energy, the demand for our generating products could also decrease or increase less than would otherwise be the case.