

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2024
OR

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

For the transition period from to .
Commission File No. 1-768

CATERPILLAR INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)	37-0602744 (IRS Employer I.D. No.)
5205 N. O'Connor Boulevard, Suite 100, Irving, Texas (Address of principal executive offices)	75039 (Zip Code)

Registrant's telephone number, including area code: **(972) 891-7700**

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

Title of each class	Trading Symbol (s)	Name of each exchange on which registered
Common Stock (\$1.00 par value)	CAT	New York Stock Exchange
5.3% Debentures due September 15, 2035	CAT35	New York Stock Exchange

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

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

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

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

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

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

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

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

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

As of June 30, 2024, there were 484,898,116 shares of common stock of the Registrant outstanding, and the aggregate market value of the voting stock held by non-affiliates of the Registrant (assuming only for purposes of this computation that directors and executive officers may be affiliates) was approximately \$160.3 billion.

As of December 31, 2024, there were 477,932,024 shares of common stock of the Registrant outstanding.

Documents Incorporated by Reference

Portions of the documents listed below have been incorporated by reference into the indicated parts of this Form 10-K, as specified in the responses to the item numbers involved.

Part III	2025 Annual Meeting Proxy Statement (Proxy Statement) to be filed with the Securities and Exchange Commission (SEC) within 120 days after the end of the fiscal year.
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PART I

Item 1. Business.

General

Originally organized as Caterpillar Tractor Co. in 1925 in the State of California, our company was reorganized as Caterpillar Inc. in 1986 in the State of Delaware. As used herein, the term “Caterpillar,” “we,” “us,” “our” or “the company” refers to Caterpillar Inc. and its subsidiaries unless designated or identified otherwise.

Overview

With 2024 sales and revenues of \$64.809 billion, Caterpillar is the world’s leading manufacturer of construction and mining equipment, off-highway diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. The company principally operates through its three primary segments - Construction Industries, Resource Industries and Energy & Transportation - and also provides financing and related services through its Financial Products segment. Caterpillar is also a leading U.S. exporter. Through a global network of independent dealers and direct sales of certain products, Caterpillar builds long-term relationships with customers around the world.

Enterprise Strategy

Our company strategy, rolled out in 2017, reflects our legacy and our continuing commitment to meet the needs of our customers and the communities in which we live and work. United by our Values, Caterpillar employees around the world share a focused view of our business through the Operating & Execution Model, through which we are making strategic choices today to create long-term profitable growth. Since 2017, we focused on three strategic areas: Expanded Offerings, Operational Excellence and Services. In 2022, we updated our strategy to also include Sustainability as a strategic area. For nearly 100 years, our longstanding commitment to sustainability has inspired us to set and achieve meaningful environmental, social and governance goals. It’s also allowed us to develop innovative products, technologies and services to support our customers on their sustainability journey. The addition of sustainability as a strategic area, together with operational excellence, expanded offerings and services, highlights our work to help customers build a better, more sustainable world.

Currently, we have five operating segments, of which four are reportable segments and are described below.

Categories of Business Organization

1. **Machinery, Energy & Transportation** — Caterpillar Inc. and its subsidiaries, excluding Financial Products. Machinery, Energy & Transportation information relates to the design, manufacturing and marketing of our products.

2. **Financial Products** — Our finance and insurance subsidiaries, primarily Caterpillar Financial Services Corporation (Cat Financial) and Caterpillar Insurance Holdings Inc. (Insurance Services). Financial Products information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment.

Other information about our operations in 2024, including certain risks associated with our operations, is included in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Construction Industries

Our Construction Industries segment is primarily responsible for supporting customers using machinery in infrastructure and building construction applications. The majority of machine sales in this segment are made in the heavy and general construction, rental, quarry and aggregates and mining industries.

The nature of customer demand for construction machinery varies around the world. Customers in developing economies often prioritize purchase price in making their investment decisions, while customers in developed economies generally weigh productivity and other performance criteria that contribute to lower owning and operating costs over the lifetime of the machine. To meet customer expectations in developing economies, Caterpillar developed differentiated product offerings that target customers in those regions, including our SEM brand machines. We believe that these customer-driven product innovations enable us to compete more effectively in developing economies. The majority of Construction Industries’ research and development spending in 2024 focused on the next generation of construction machines.

The competitive environment for construction machinery is characterized by some global competitors and many regional and specialized local competitors. Examples of global competitors include CASE (part of CNH Industrial N.V.), Deere Construction & Forestry (part of Deere & Company), Doosan Bobcat (Part of Doosan Group), Hitachi Construction Machinery Co., Ltd., Hyundai Construction Equipment Co., Ltd., Hyundai Doosan Infracore Co., Ltd. (both part of Hyundai Heavy Industries Group), J.C. Bamford Excavators Ltd., Kobelco Construction Machinery (part of Kobe Steel, Ltd), Komatsu Ltd., Kubota Farm & Industrial Machinery (part of Kubota Corporation), Sany Heavy Industry Co., Ltd., and Volvo Construction Equipment (part of the Volvo Group). As an example of regional and local competitors, our competitors in China also include Guangxi LiuGong Machinery Co., Ltd., Longking Holdings Ltd., Sany Heavy Industry Co., XCMG Construction Machinery Co., Ltd., Shandong Lingong Construction Machinery Co., Ltd. (SDLG, JV with Volvo Construction Equipment) and Shantui Construction Machinery Co., Ltd., (part of Shandong Heavy Industry Group Co.). Each of these companies has varying product lines that compete with Caterpillar products, and each has varying degrees of regional focus.

The Construction Industries portfolio includes the following product families as well as related parts and work tools:

- | | | |
|-------------------------|----------------------|---------------------------------------|
| · asphalt pavers | · motor graders | · track-type tractors (small, medium) |
| · backhoe loaders | · pipelayers | · track excavators (mini, small |
| · cold planers | · road reclaimers | medium, large) |
| · compactors | · skid steer loaders | · wheel excavators |
| · compact track loaders | · telehandlers | · wheel loaders (compact, small, |
| · forestry machines | · track-type loaders | medium) |
| · material handlers | | |

Resource Industries

The Resource Industries segment is primarily responsible for supporting customers using machinery in mining, heavy construction and quarry and aggregates. Caterpillar offers a broad product range and services to deliver comprehensive solutions for our customers. We develop and manufacture high productivity equipment for both surface and underground mining operations around the world, as well as provide hydraulic systems, electronics and software for Caterpillar machines and engines. Our equipment is used to extract and haul copper, iron ore, coal, oil sands, aggregates, gold and other minerals and ores, as well as a variety of heavy construction applications. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management systems, equipment management analytics and autonomous machine capabilities.

Customers in most markets place an emphasis on equipment that is highly productive, reliable and provides the lowest total cost of ownership over the life of the equipment. In some developing markets, customers often prioritize purchase price in making their investment decisions. We believe our ability to control the integration and design of key machine components and innovative technologies represents a competitive advantage. Our research and development efforts remain focused on providing customers the lowest total cost of ownership enabled through the highest quality, most productive products and services in the industry.

The competitive environment for Resource Industries consists of a few larger global competitors that compete in several of the markets that we serve and a substantial number of smaller companies that compete in a more limited range of products, applications, and regional markets. Our global surface competitors include Deere Construction & Forestry (part of Deere & Company), Epiroc AB, Hitachi Construction Machinery Co., Ltd., Komatsu Ltd., Liebherr-International AG, Sandvik AB, and Volvo Construction Equipment. Our global underground competitors include Epiroc AB, Komatsu Ltd., and Sandvik AB.

The Resource Industries product portfolio includes the following machines and related parts and services:

- | | | |
|-----------------------------|--------------------------|---|
| · electric rope shovels | · large wheel loaders | · landfill compactors |
| · draglines | · off-highway trucks | · soil compactors |
| · hydraulic shovels | · wide-body trucks | · machinery components |
| · rotary drills | · articulated trucks | · autonomous ready vehicles and solutions |
| · hard rock vehicles | · wheel tractor scrapers | · select work tools |
| · large track-type tractors | · wheel dozers | · safety services and mining performance |
| · large mining trucks | · fleet management | solutions |

Energy & Transportation

Our Energy & Transportation segment supports customers in oil and gas, power generation, marine, rail and industrial applications, including Caterpillar machines. The product and services portfolio includes reciprocating engines, generator sets, integrated systems and solutions, turbines and turbine-related services, electrified powertrain and zero-emission power sources and service solutions development, the remanufacturing of Caterpillar engines and components, remanufacturing services for other companies, diesel-electric locomotives and other rail-related products and services as well as product support of on-highway engines.

Regulatory emissions standards require us to continue to make investments as new products and new regulations are introduced. Ongoing compliance with these regulations remains a focus. Emissions compliance in developing markets is complex due to rapidly evolving and unique requirements where enforcement processes can often vary. We employ robust product development, manufacturing processes and testing to help us comply with these regulations.

The competitive environment for reciprocating engines in marine, oil and gas, industrial and electric power generation systems along with turbines in oil and gas and electric power generation consists of a few larger global competitors that compete in a variety of markets that Caterpillar serves, and a substantial number of smaller companies that compete in a limited-size product range, geographic region and/or application. Principal global competitors include Cummins Inc., Deutz AG, Rolls-Royce Power Systems AG and Siemens Energy AG. Other competitors, such as Volvo Penta AB, FPT Industrial SpA (Iveco Group), INNIO Group, GE Vernova Inc., Kawasaki Heavy Industries Ltd., MAN Energy Solutions SE (VW), Weichai Power Co., Ltd., and other emerging market competitors compete in certain markets in which Caterpillar competes. An additional set of competitors, including Aggreko plc, Generac Holdings Inc., Rehiko Energy, Baker Hughes Co., and others, are primarily packagers who source engines and/or other components from domestic and international suppliers and market products regionally and internationally through a variety of distribution channels. In rail-related businesses, our global competitors include Wabtec Corp, Greenbrier Companies, Inc., Voestalpine AG, Vossloh AG, Alstom SA, and Siemens Mobility A/S. We also compete with other companies on a more limited range of products, services and/or geographic regions.

The Energy & Transportation portfolio includes the following products and related parts:

- Reciprocating engine powered generator sets
- Reciprocating engines, drivetrain and integrated systems and solutions supplied to the industrial industry as well as Caterpillar machinery
- Integrated systems and solutions used in the electric power generation industry
- Turbines, centrifugal gas compressors and related services
- Reciprocating engines, drivetrain and integrated systems and solutions for the marine and oil and gas industries
- Diesel-electric locomotives and components and other rail-related products and services

Financial Products Segment

The business of our Financial Products Segment is primarily conducted by Cat Financial, Insurance Services and their respective subsidiaries and affiliates. Cat Financial is a wholly owned finance subsidiary of Caterpillar Inc., and it provides retail and wholesale financing alternatives to customers and dealers around the world for Caterpillar products and services, as well as financing for power generation facilities that, in most cases, incorporate Caterpillar products. Retail financing is primarily comprised of installment sale contracts and other equipment-related loans, working capital loans, finance leases, operating leases, and revolving charge accounts. Wholesale financing to Caterpillar dealers consists primarily of inventory and rental fleet financing. In addition, Cat Financial purchases short-term wholesale trade receivables from Caterpillar. The various financing plans offered by Cat Financial are designed to support sales of Caterpillar products and services and generate financing income for Cat Financial. A significant portion of our activity is conducted in North America, and we have additional offices and subsidiaries in Latin America, Asia/Pacific, Europe and Africa.

For over 40 years, Cat Financial has been providing financing for Caterpillar products, contributing to our knowledge of asset values, industry trends, financing structures and customer needs.

In certain instances, Cat Financial's operations are subject to supervision and regulation by state, federal and various foreign governmental authorities, and may be subject to various laws and judicial and administrative decisions imposing various requirements and restrictions which, among other things, (i) regulate credit granting activities and the administration of loans, (ii) establish maximum interest rates, finance charges and other charges, (iii) require disclosures to customers, (iv) govern secured transactions, (v) set collection, foreclosure, repossession and other trade practices and (vi) regulate the use and reporting of information related to a borrower's credit experience. Cat Financial's ability to comply with these and other governmental and legal requirements and restrictions affects its operations.

Cat Financial's retail loans include:

- Loans that allow customers and dealers to use their Caterpillar equipment or other assets as collateral to obtain financing.
- Installment sale contracts, which are equipment loans that enable customers to purchase equipment with structured payments over time.

Cat Financial's retail leases include:

- Finance (non-tax) leases, where the lessee for tax purposes is considered to be the owner of the equipment during the term of the lease, that either require or allow the customer to purchase the equipment for a fixed price at the end of the term.
- Tax leases that are classified as either operating or finance leases for financial accounting purposes, depending on the characteristics of the lease. For tax purposes, we are considered the owner of the equipment.

Cat Financial also purchases short-term receivables from Caterpillar.

Cat Financial's wholesale loans and leases include inventory/rental programs, which provide assistance to dealers by financing their new Caterpillar inventory and rental fleets.

Cat Financial operates in a highly competitive environment, with financing for users of Caterpillar equipment and services available through a variety of sources, principally commercial banks and finance and leasing companies. Our competitors include Wells Fargo Equipment Finance Inc., Banc of America Leasing & Capital LLC, BNP Paribas Leasing Solutions Limited, Australia and New Zealand Banking Group Limited, Société Générale S.A. and various other banks and finance companies. In addition, many of the manufacturers that compete with Caterpillar also own financial subsidiaries, such as John Deere Capital Corporation, Komatsu Financial L.P., Volvo Financial Services and Kubota Credit Corporation, which utilize many below-market interest rate programs (funded by the manufacturer) to support machine sales. Cat Financial works with the broader Caterpillar organization to provide a broad array of financial merchandising programs to compete around the world.

The financial results of Cat Financial are largely dependent upon the ability of Caterpillar dealers to sell equipment and customers' willingness to enter into financing or leasing agreements. Cat Financial is also affected by, among other things, the availability of funds from its financing sources, its cost of funds relative to its competitors and general economic conditions such as inflation and market interest rates.

Cat Financial has a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of its debt portfolio with the interest rate profile of its receivables portfolio within predetermined ranges on an ongoing basis. In connection with that policy, Cat Financial uses interest rate derivative instruments to modify the debt structure to match assets within the receivables portfolio. This matched funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move. For more information regarding match funding, please see Note 4 — "Derivative financial instruments and risk management" of Part II, Item 8 "Financial Statements and Supplementary Data." See also the risk factors associated with our financial products business included in Item 1A. of this Form 10-K.

In managing foreign currency risk for Cat Financial's operations, the objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions, and future transactions denominated in foreign currencies. This policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between the assets and liabilities, and exchange rate risk associated with future transactions denominated in foreign currencies.

Cat Financial provides financing only when certain criteria are met. Credit decisions are based on a variety of credit quality factors including prior payment experience, customer financial information, credit ratings, loan-to-value ratios and other internal metrics. Cat Financial typically maintains a security interest in retail-financed equipment and generally requires physical damage insurance coverage on financed equipment. Cat Financial finances a significant portion of Caterpillar dealers' sales and inventory of Caterpillar equipment throughout the world. Cat Financial's competitive position is improved by marketing programs offered in conjunction with Caterpillar and/or Caterpillar dealers. Under these programs, Caterpillar, or the dealer, funds an amount at the outset of the transaction, which Cat Financial then recognizes as revenue over the term of the financing. We believe that these marketing programs provide Cat Financial a significant competitive advantage in financing Caterpillar products.

Caterpillar Insurance Company, a wholly owned subsidiary of Caterpillar Insurance Holdings Inc., is a U.S. insurance company domiciled in Missouri and primarily regulated by the Missouri Department of Insurance. Caterpillar Insurance Company is licensed to conduct property and casualty insurance business in 50 states, the District of Columbia and Guam and, as such, is also regulated in those jurisdictions. The State of Missouri acts as the lead regulatory authority and monitors Caterpillar Insurance Company's financial status to ensure that it is in compliance with minimum solvency requirements, as well as other financial ratios prescribed by the National Association of Insurance Commissioners. Caterpillar Insurance Company is also licensed to conduct insurance business through a branch in Zurich, Switzerland and, as such, is regulated by the Swiss Financial Market Supervisory Authority.

Caterpillar Life Insurance Company, a wholly owned subsidiary of Caterpillar, is a U.S. insurance company domiciled in Missouri and primarily regulated by the Missouri Department of Insurance. Caterpillar Life Insurance Company is licensed to conduct life and accident and health insurance business in 26 states and the District of Columbia and, as such, is also regulated in those jurisdictions. The State of Missouri acts as the lead regulatory authority, and it monitors the financial status to ensure that it is in compliance with minimum solvency requirements, as well as other financial ratios prescribed by the National Association of Insurance Commissioners. Caterpillar Life Insurance Company provides reinsurance coverage to Caterpillar Insurance Company. Specifically, Caterpillar Life Insurance Company has entered into a reinsurance agreement with Caterpillar Insurance Company, assuming 100% of the risk of an Accident and Health Stop Loss Insurance Policy to cover a Caterpillar Voluntary Employees' Benefits Association (VEBA) Trust for medical losses sustained by a select group of Caterpillar retirees and dependents.

Caterpillar Insurance Co. Ltd., a wholly owned subsidiary of Caterpillar Insurance Holdings Inc., is a captive insurance company domiciled in Bermuda and regulated by the Bermuda Monetary Authority. Caterpillar Insurance Co. Ltd. is registered as a Class 2 (General Business) and Class B (Long-Term) insurer with the Bermuda Monetary Authority. Under its Class 2 insurance license, Caterpillar Insurance Co. Ltd. insures its parent and affiliates for general liability, property, auto liability and cargo. It also provides reinsurance to Caterpillar Insurance Company under a quota share reinsurance agreement for its contractual liability and contractors' equipment programs in the United States. In addition, Caterpillar Insurance Co. Ltd. reinsures 100% of the international employee benefit plans of Caterpillar Inc. through retrocession agreements with other insurers. The employee benefits coverages include medical and accident coverages, which are reported under its Class 2 insurance license, and life and disability coverages, which are reported under its Class B insurance license. The Bermuda Monetary Authority is responsible for monitoring compliance with solvency requirements and requires an Annual Financial Filing for this purpose.

Caterpillar Insurance Services Corporation, a wholly owned subsidiary of Caterpillar Insurance Holdings Inc., is a Tennessee insurance agency licensed in all 50 states, the District of Columbia and Guam. It provides brokerage and insurance services for all property and casualty and life and health lines of business.

Caterpillar's insurance group provides protection and service for claims under the following programs:

- Contractual Liability Insurance to insure certain service contract obligations of Caterpillar and its affiliates, Caterpillar dealers and original equipment manufacturers (OEMs).
- Cargo reinsurance for the worldwide cargo risks of Caterpillar products.
- Contractors' Equipment Physical Damage Insurance for equipment manufactured by Caterpillar or OEMs, which is leased, rented or sold by third party dealers to customers.
- General liability, employer's liability, auto liability and property insurance for Caterpillar.
- Life, disability, medical and accident reinsurance for Caterpillar's international employee benefits program (non-U.S.).
- Reinsurance to cover VEBA Trust for medical claims of certain Caterpillar retirees and dependents.
- Brokerage and insurance services for property and casualty and life and health business.

Competitive Environment

Caterpillar products and services are sold worldwide into a variety of highly competitive markets. In all markets, we compete on the basis of product performance, customer service, quality and price. From time to time, the intensity of competition results in price discounting in a particular industry or region. Such price discounting puts pressure on margins and can negatively impact operating profit. Outside the United States, certain competitors enjoy competitive advantages inherent to operating in their home countries or regions.

Raw Materials and Component Products

We source our raw materials and manufactured components from suppliers both domestically and internationally. These purchases include unformed materials and rough and finished parts. Unformed materials include a variety of steel products, which are then cut or formed to shape and machined in our facilities. Rough parts include various sized steel and iron castings and forgings, which are machined to final specification levels inside our facilities. Finished parts are ready to assemble components, which are made either to Caterpillar specifications or to supplier developed specifications. We machine and assemble some of the components used in our machines, engines and power generation units and to support our after-market dealer parts sales. We also purchase various goods and services used in production, logistics, offices and product development processes. We maintain global strategic sourcing models to meet our global facilities' production needs while building long-term supplier relationships and leveraging enterprise spend. We expect our suppliers to maintain, at all times, industry-leading levels of quality and the ability to timely deliver raw materials and component products for our machine and engine products. However, in some cases, increases in demand or supply chain disruptions have led to parts and components constraints across some products. We use a variety of agreements with suppliers to protect our intellectual property and processes to monitor and mitigate risks of the supply base causing a business disruption. The risks monitored include supplier financial viability, the ability to increase or decrease production levels, business continuity, quality and delivery.

Patents and Trademarks

We own a number of patents and trademarks, which have been obtained over a period of years and relate to the products we manufacture and the services we provide. These patents and trademarks are generally considered beneficial to our business. We do not regard our business as being dependent upon any single patent or group of patents.

Order Backlog

The dollar amount of backlog believed to be firm was approximately \$30.0 billion at December 31, 2024 and \$27.5 billion at December 31, 2023. Compared with year-end 2023, the order backlog increased in Energy & Transportation, while Construction Industries and Resource Industries decreased. Of the total backlog at December 31, 2024, approximately \$8.0 billion was not expected to be filled in 2025.

Dealers and Distributors

We distribute our machines principally through a worldwide organization of dealers (dealer network), 41 located in the United States and 111 located outside the United States, serving 187 countries. We sell reciprocating engines principally through the dealer network and to other manufacturers for use in products. We also sell some of the reciprocating engines manufactured by our subsidiary Perkins Engines Company Limited through its worldwide network of 88 distributors covering 185 countries. We sell the FG Wilson branded electric power generation systems through its worldwide network of 108 distributors covering 158 countries.

Our dealers do not deal exclusively with our products; however, in most cases sales and servicing of our products are the dealers' principal business. We sell some products, primarily turbines and locomotives, directly to end customers through sales forces employed by the company. At times, these employees are assisted by independent sales representatives.

While the large majority of our worldwide dealers are independently owned and operated, we own and operate a dealership in Japan that covers approximately 80% of the Japanese market: Nippon Caterpillar Division. We are currently operating this Japanese dealer directly and we report its results in the All Other Segment. There are also three independent dealers in the Southern Region of Japan.

For Caterpillar-branded products, the company's relationship with each of its independent dealers is memorialized in standard sales and service agreements. Pursuant to these agreements, the company grants the dealer the right to purchase and sell its products and to service the products in a specified geographic service territory. The company establishes prices to dealers after

receiving input from dealers on transactional pricing in the marketplace. The company also agrees to defend its intellectual property and to provide warranty and technical support to the dealer. The agreement further grants the dealer a non-exclusive license to use the company's trademarks, service marks and brand names. In some instances, a separate trademark agreement exists between the company and a dealer.

In exchange for these rights, the agreement obligates the dealer to develop and promote the sale of the company's products to current and prospective customers in the dealer's service territory. Each dealer agrees to employ adequate sales and support personnel to market, sell and promote the company's products, demonstrate and exhibit the products, perform the company's product improvement programs, inform the company concerning any features that might affect the safe operation of any of the company's products and maintain detailed books and records of the dealer's financial condition, sales and inventories and make these books and records available at the company's reasonable request.

These sales and service agreements are terminable at will by either party primarily upon 90 days written notice.

Human Capital

Core Values

Caterpillar's global workforce is united by Our Values In Action, Caterpillar's Code of Conduct. Integrity, Excellence, Teamwork, Commitment and Sustainability provide the foundation for our values-based culture. Our human capital management principles are embedded in our values. Our values unite us, and reflect our diverse cultures, languages, geographies, and businesses, as one Caterpillar team.

Health and Safety

The health and safety of our employees is an important focus at Caterpillar. Our safety driven strategy is focused on preventing serious injuries and learning from those closest to the work. In 2024, the Company achieved a recordable injury frequency rate of 0.43, compared to the 2023 recordable injury frequency rate of 0.40. We strive to continually reduce our recordable injuries utilizing programs that amplify our safety culture globally.

Talent and Leadership Development

In addition to our focus on values and safety, we strive to continually attract, develop, engage, and retain a high-performing global team that executes our enterprise strategy of long-term profitable growth. We are committed to fostering an inclusive environment and a workforce that is representative of the diverse customers and communities we serve around the globe. Our Values In Action enable every individual to achieve their fullest potential and every team to help drive business success. These principles guide us in our daily operating rhythm. In addition, we make on-going investments in our team to develop employees and help individuals reach their full potential.

Our leadership development programs focus on encouraging a variety of experiences to help employees broaden understanding and increase perspective. Our leadership curriculums include building resilient and high performing teams as core development principles. Additionally, skill-based programs to upskill our manufacturing employees are developed locally and tailored to the specific needs of the business. All employees have access to mentoring programs that connect participants with senior leaders and peers who can support their career goals and development.

Our global internships, engineering co-ops, and career programs for engineering, marketing, and manufacturing provide development opportunities for early career employees. We also have a continual focus on strengthening technical, professional and leadership capabilities at every level using contemporary learning strategies to foster high performance. Strategic talent reviews and succession planning occur at a minimum, annually, across our businesses. Mentoring programs connect participants with senior leaders and peers who can support their career goals and development.

Our 14 Employee Resource Groups (ERGs), which are sponsored and supported by leadership, help ensure different voices and perspectives contribute to our strategy for long-term profitable growth. They also engage our employees, helping contribute to development and retention. Our ERGs provide many contributions to help further our business strategy including partnerships with recruiters and early career and professional organizations that can assist in strengthening the talent pipeline and programs that educate and inform on the richness of the global cultures that we share.

Compensation, Benefits and Employee Insights

Providing competitive benefits and compensation underpins our commitment to our engaged and productive employees. Our pay-for-performance philosophy aligns employee's individual contributions, behaviors and business results with individual rewards. Our comprehensive Total Health programs focus on purpose, as well as physical and mental health, emotional and social support, and financial wellness. The annual Employee Insights Survey provides all employees the opportunity to confidentially share their perspectives and engages leaders to listen, learn and respond to employee feedback to help foster a positive work environment.

Employment

Management aligns employment levels with the needs of the business. We believe we have the appropriate human capital resources to successfully operate and deliver our enterprise strategy. As of December 31, 2024, we employed about 112,900 full-time persons of whom approximately 61,400 were located outside the United States. In the United States, we employed approximately 51,500 full-time persons, most of whom are at-will employees and, therefore, not subject to any type of employment contract or agreement. At select business units, we have hired certain highly specialized employees under employment contracts that specify a term of employment, pay and other benefits.

Full-Time Employees at Year-End		
	2024	2023
Inside U.S.	51,500	50,800
Outside U.S.	61,400	62,400
Total	112,900	113,200
By Region:		
North America	52,000	51,200
EAME	15,900	16,600
Latin America	19,700	20,300
Asia/Pacific	25,300	25,100
Total	112,900	113,200

As of December 31, 2024, there were 7,386 hourly production employees in the United States who were covered by collective bargaining agreements with various labor unions, including The United Automobile, Aerospace and Agricultural Implement Workers of America (UAW), The International Association of Machinists and The United Steelworkers. Outside the United States, the company enters into employment contracts and agreements in those countries in which such relationships are mandatory or customary. The provisions of these agreements generally correspond in each case with the required or customary terms in the subject jurisdiction.

Environmental Matters

The company is regulated by federal, state and international environmental laws governing our use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, the investigation, remediation, and operating and maintenance costs of the remedial action are accrued against our earnings. Costs are accrued based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected.

to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly basis. The amount recorded for environmental remediation is not material and is included in the line item "Accrued expenses" in Statement 3 — "Consolidated Financial Position at December 31" of Part II, Item 8 "Financial Statements and Supplementary Data." There is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

Available Information

The company files electronically with the Securities and Exchange Commission (SEC) required reports on Form 8-K, Form 10-Q, Form 10-K and Form 11-K; proxy materials; ownership reports for insiders as required by Section 16 of the Securities Exchange Act of 1934 (Exchange Act); registration statements on Forms S-3 and S-8, as necessary; and other forms or reports as required. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The company maintains a website (www.Caterpillar.com) and copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to these reports filed or furnished with the SEC are available free of charge through our website (www.Caterpillar.com/secfilings) as soon as reasonably practicable after filing with the SEC. Copies of our board committee charters, our board's Guidelines on Corporate Governance Issues, Worldwide Code of Conduct and other corporate governance information are available on our website (www.Caterpillar.com/governance) and are also available free of charge. The information contained on the company's website is not included in, or incorporated by reference into, this annual report on Form 10-K.

Additional company information may be obtained as follows:

Current information -

- view additional financial information on-line at www.Caterpillar.com/en/investors/financial-information.html
- request, view or download materials on-line or register for email alerts at www.Caterpillar.com/materialsrequest

Historical information -

- view/download on-line at www.Caterpillar.com/historical

Item 1A. Risk Factors.

The statements in this section describe the most significant risks to our business and should be considered carefully in conjunction with Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the "Notes to Consolidated Financial Statements" of Part II, Item 8 "Financial Statements and Supplementary Data" to this Form 10-K. In addition, the statements in this section and other sections of this Form 10-K, including in Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations," include "forward-looking statements" as that term is defined in the Private Securities Litigation Reform Act of 1995 and involve uncertainties that could significantly impact results. Forward-looking statements give current expectations or forecasts of future events about the company or our outlook. You can identify forward-looking statements by the fact they do not relate to historical or current facts and by the use of words such as "believe," "expect," "estimate," "anticipate," "will be," "should," "plan," "forecast," "target," "guide," "project," "intend," "could" and similar words or expressions.

Forward-looking statements are based on assumptions and on known risks and uncertainties. Although we believe we have been prudent in our assumptions, any or all of our forward-looking statements may prove to be inaccurate, and we can make no guarantees about our future performance. Should known or unknown risks or uncertainties materialize or underlying assumptions prove inaccurate, actual results could materially differ from past results and/or those anticipated, estimated or projected.

We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise. You should, however, consult any subsequent disclosures we make in our filings with the SEC on Form 10-Q or Form 8-K.

The following is a cautionary discussion of risks, uncertainties and assumptions that we believe are material to our business. In addition to the factors discussed elsewhere in this report, the following are some of the important factors that, individually or in the aggregate, we believe could make our actual results differ materially from those described in any forward-looking

statements. It is impossible to predict or identify all such factors and, as a result, you should not consider the following factors to be a complete discussion of risks, uncertainties and assumptions.

MACROECONOMIC RISKS

Our business and the industries we serve are highly sensitive to global and regional economic conditions.

Our results of operations are materially affected by economic conditions globally and regionally and in the particular industries we serve. The demand for our products and services tends to be cyclical and can be significantly reduced in periods of economic weakness characterized by lower levels of government and business investment, lower levels of business confidence, lower corporate earnings, high real interest rates, lower credit activity or tighter credit conditions, perceived or actual industry overcapacity, higher unemployment and lower consumer spending. A prolonged period of economic weakness may also result in increased expenses due to higher allowances for doubtful accounts and potential goodwill and asset impairment charges. Economic conditions vary across regions and countries, and demand for our products and services generally increases in those regions and countries experiencing economic growth and investment. Slower economic growth or a change in the global mix of regions and countries experiencing economic growth and investment could have an adverse effect on our business, results of operations and financial condition.

The energy, transportation, and mining industries are significant adopters of Caterpillar products. In these industries customers are likely to base their purchase decisions upon expected future commodity dynamics, including price. Commodity price volatility may be abrupt and unpredictable in response to global economic conditions, government actions, regulatory changes, supply/demand dynamics, innovation, and commodity substitutions among others. Economic conditions affecting the industries we serve may reduce capital expenditures in response to a variety of the aforementioned conditions. Reduction in these capital expenditures may lead to decreased demand for Caterpillar products and services as well as aftermarket parts as customers may choose to extend preventative maintenance and delay overhauls when possible.

The rates of infrastructure spending, commercial construction and housing starts also play a significant role in our results. Our products are an integral component of these activities, and as these activities decrease, demand for our products and services may be significantly impacted, which could negatively impact our results.

Catastrophic events could materially adversely affect our business, results of operations and/or financial condition.

The occurrence of a major earthquake, fire, flood, tsunami or other weather event, power loss, telecommunications failure, software or hardware malfunctions, pandemics, cyber-attack, war, terrorist attack or other catastrophic event that our disaster recovery plans do not adequately address, could adversely affect our employees, our systems, our ability to produce and distribute our products, and our reputation. Pandemics can have a significant impact around the world, prompting governments and businesses to take unprecedented measures in response. Such measures could include travel bans and restrictions, quarantines, shelter in place orders and shutdowns. Those measures could impact all or portions of our workforce and operations and the operations of our customers, dealers and suppliers. Material and component shortages, logistics constraints and labor inefficiencies could limit our ability to meet customer demand, which could have a material adverse effect on our business, results of operations and/or financial condition.

These catastrophic events can significantly increase economic and customer demand uncertainty, cause inflationary pressure in the U.S. and elsewhere and lead to volatility in customer demand for the Company's products and services and cause supply chain disruptions. Economic uncertainties could affect customer demand for the Company's products and services, the value of the equipment financed or leased, the demand for financing and the financial condition and credit risk of our dealers and customers.

A catastrophic event resulting in the destruction or disruption of our workforce, our systems, our ability to produce and distribute our products, any of our data centers or our critical business or information technology systems could adversely affect our ability to conduct normal business operations and our operating results or cash flows. The adverse effects of any such catastrophic event would be exacerbated if experienced at the same time as another unexpected and adverse event.

Commodity price changes, material price increases, fluctuations in demand for our products and services, significant disruptions to our supply chains or significant shortages of labor and material may adversely impact our financial results or our ability to meet commitments to customers.

We are a significant user of steel and many other commodities required for the manufacture of our products. Increases in the prices of such commodities would increase our costs, negatively impacting our business, results of operations and financial

condition if we are unable to fully offset the effect of these increased costs through price increases, productivity improvements, cost reduction programs or hedging programs.

We rely on suppliers to produce or secure material required for the manufacture of our products. Production challenges at suppliers (including suppliers of semiconductors), a disruption in deliveries to or from suppliers or decreased availability of raw materials or commodities could have an adverse effect on our ability to meet our commitments to customers or increase our operating costs. On the other hand, in circumstances where demand for our products is less than we expect, we may experience excess inventories and be forced to incur additional costs and our profitability may suffer. Our business, competitive position, results of operations or financial condition could be negatively impacted if supply is insufficient for our operations, if significant transportation delays interfere with deliveries, if we experience excess inventories or if we are unable to adjust our production schedules or our purchases from suppliers to reflect changes in customer demand and market fluctuations on a timely basis.

Changes in government monetary or fiscal policies may negatively impact our results.

Most countries where our products and services are sold have established central banks to regulate monetary systems and influence economic activities, generally by adjusting interest rates. Interest rate changes affect overall economic growth, which affects demand for residential and nonresidential structures, as well as energy and mined products, which in turn affects sales of our products and services that support these activities. Interest rate changes may also affect our customers' ability to finance machine purchases, can change the optimal time to keep machines in a fleet and can impact the ability of our suppliers to finance the production of parts and components necessary to manufacture and support our products. Increases in interest rates could negatively impact sales and create supply chain inefficiencies.

Central banks and other policy arms of many countries may take actions to vary the amount of liquidity and credit available in an economy. The impact from a change in liquidity and credit policies could negatively affect the customers and markets we serve or our suppliers, create supply chain inefficiencies and could adversely impact our business, results of operations and financial condition.

Changes in monetary and fiscal policies, along with other factors, may cause currency exchange rates to fluctuate. Actions that lead the currency exchange rate of a country where we manufacture products to increase relative to other currencies could reduce the competitiveness of products made in that country, which could adversely affect our competitive position, results of operations and financial condition.

Government policies on taxes and spending also affect our business. Throughout the world, government spending finances a significant portion of infrastructure development, such as highways, rail systems, airports, sewer and water systems, waterways and dams. Tax regulations determine asset depreciation lives and impact the after-tax returns on business activity and investment, both of which influence investment decisions. Unfavorable developments, such as decisions to reduce public spending or to increase taxes, could negatively impact our results.

Our global operations are exposed to political and economic risks, commercial instability and events beyond our control in the countries in which we operate.

Our global operations are dependent upon products manufactured, purchased and sold in the U.S. and internationally, including in countries with political and economic instability or uncertainty. Some countries have greater political and economic volatility and greater vulnerability to infrastructure and labor disruptions than others. Our business could be negatively impacted by adverse fluctuations in freight costs, fuel costs (e.g., diesel, bunker, jet), limitations on shipping and receiving capacity, and other disruptions in the transportation and shipping infrastructure at important geographic points of exit and entry for our products. Operating in different regions and countries exposes us to numerous risks, including:

- multiple and potentially conflicting laws, regulations and policies that are subject to change;
- imposition of currency restrictions, restrictions on repatriation of earnings or other restraints;
- imposition of new or additional tariffs or quotas;
- withdrawal from or modification of trade agreements or the negotiation of new trade agreements;
- imposition of new or additional trade and economic sanctions laws imposed by the U.S. or foreign governments;
- war or acts of terrorism; and
- political and economic instability or civil unrest that may severely disrupt economic activity in affected countries.

The occurrence of one or more of these events may negatively impact our business, results of operations and financial condition.

OPERATIONAL RISKS

The success of our business depends on our ability to develop, produce and market quality products that meet our customers' needs.

Our business relies on continued global demand for our brands and products. To achieve business goals, we must develop and sell products that appeal to our dealers, OEMs and end-user customers. This is dependent on a number of factors, including our ability to maintain key dealer relationships; our ability to produce products that meet the quality, performance and price expectations of our customers and our ability to develop effective sales, advertising and marketing programs. In addition, our continued success in selling products that appeal to our customers is dependent on leading-edge innovation, with respect to both products and operations, and on the availability and effectiveness of legal protection for our innovations. Failure to continue to deliver high quality, innovative, competitive products to the marketplace, to adequately protect our intellectual property rights; to supply products that meet applicable regulatory requirements, including engine exhaust emission requirements or to predict market demands for, or gain market acceptance of, our products, could have a negative impact on our business, results of operations and financial condition.

We operate in a highly competitive environment, which could adversely affect our sales and pricing.

We operate in a highly competitive environment. We compete on the basis of a variety of factors, including product performance, customer service, quality and price. There can be no assurance that our products will be able to compete successfully with other companies' products. Thus, our share of industry sales could be reduced due to aggressive pricing or product strategies pursued by competitors, unanticipated product or manufacturing difficulties, our failure to price our products competitively, our failure to produce our products at a competitive cost or an unexpected buildup in competitors' new machine or dealer-owned rental fleets, which could lead to downward pressure on machine rental rates and/or used equipment prices.

Lack of customer acceptance of price increases we announce from time to time, changes in customer requirements for price discounts, changes in our customers' behavior or a weak pricing environment could have an adverse impact on our business, results of operations and financial condition.

In addition, our results and ability to compete may be impacted negatively by changes in our geographic and product mix of sales.

Increased information technology security threats and more sophisticated computer crime pose a risk to our systems, networks, products and services.

We rely upon information technology systems and networks, some of which are managed by third parties, in connection with a variety of business activities. Additionally, we collect and store sensitive information relating to our business, customers, dealers, suppliers and employees. Operating these information technology systems and networks and processing and maintaining this data in a secure manner are critical to our business operations and strategy. Information technology security threats -- from user error to cybersecurity attacks designed to gain unauthorized access to our systems, networks and data -- are increasing in frequency and sophistication. Cybersecurity attacks from threat actors globally range from random attempts to coordinated and targeted attacks, including sophisticated computer crime and advanced persistent threats. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Cybersecurity attacks could also include attacks targeting customer data or the security, integrity and/or reliability of the hardware and software installed in our products. It is possible that our information technology systems and networks, or those managed or provided by third parties, could have vulnerabilities, which could go unnoticed for a period of time. While various procedures and controls have been and are being utilized to mitigate such risks, there can be no guarantee that the actions and controls we have implemented and are implementing, or which we cause or have caused third-party service providers to implement, will be sufficient to protect and mitigate associated risks to our systems, information or other property.

We have experienced cybersecurity threats and vulnerabilities in our systems and those of our third party providers, and we have experienced viruses and attacks targeting our information technology systems and networks. Such prior events, to date, have not had a material impact on our financial condition, results of operations or liquidity. However, the potential consequences of a future material cybersecurity attack include reputational damage, litigation with third parties, government enforcement actions, penalties, disruption to systems, unauthorized release of confidential or otherwise protected information, corruption of data, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition. Due to the evolving nature of such security threats, the potential impact of any future incident cannot be predicted. Further, the amount of insurance coverage we maintain may be inadequate to cover claims or liabilities relating to a cybersecurity attack.

In addition, data we collect, store and process are subject to a variety of U.S. and international laws and regulations, such as the European Union's General Data Protection Regulation and the California Consumer Privacy Act, which may carry significant potential penalties for noncompliance.

Our business is subject to the inventory management decisions and sourcing practices of our dealers and our OEM customers.

We sell finished products primarily through an independent dealer network and directly to OEMs and are subject to risks relating to their inventory management decisions and operational and sourcing practices. Both carry inventories of finished products as part of ongoing operations and adjust those inventories based on their assessments of future needs and market conditions, including levels of used equipment inventory and machine rental usage rates. Such adjustments may impact our results positively or negatively. If the inventory levels of our dealers and OEM customers are higher than they desire, they may postpone product purchases from us, which could cause our sales to be lower than the end-user demand for our products and negatively impact our results. Similarly, our results could be negatively impacted through the loss of time-sensitive sales if our dealers and OEM customers do not maintain inventory levels sufficient to meet customer demand.

We may not realize all of the anticipated benefits of our acquisitions, joint ventures or divestitures, or these benefits may take longer to realize than expected.

In pursuing our business strategy, we routinely evaluate targets and enter into agreements regarding possible acquisitions, divestitures and joint ventures. We often compete with others for the same opportunities. To be successful, we conduct due diligence to identify valuation issues and potential loss contingencies, negotiate transaction terms, complete complex transactions and manage post-closing matters such as the integration of acquired businesses. Further, while we seek to mitigate risks and liabilities of such transactions through due diligence, among other things, there may be risks and liabilities that our due diligence efforts fail to discover, that are not accurately or completely disclosed to us or that we inadequately assess. We may incur unanticipated costs or expenses following a completed acquisition, including post-closing asset impairment charges, expenses associated with eliminating duplicate facilities, litigation, and other liabilities. Risks associated with our past or future acquisitions also include the following:

- the failure to achieve the acquisition's revenue or profit forecast;
- the business culture of the acquired business may not match well with our culture;
- technological and product synergies, economies of scale and cost reductions may not occur as expected;
- unforeseen expenses, delays or conditions may be imposed upon the acquisition, including due to required regulatory approvals or consents;
- we may acquire or assume unexpected liabilities or be subject to unexpected penalties or other enforcement actions;
- faulty assumptions may be made regarding the macroeconomic environment or the integration process;
- unforeseen difficulties may arise in integrating operations, processes and systems;
- higher than expected investments may be required to implement necessary compliance processes and related systems, including information technology systems, accounting systems and internal controls over financial reporting;
- we may fail to retain, motivate and integrate key management and other employees of the acquired business;
- higher than expected costs may arise due to unforeseen changes in tax, trade, environmental, labor, safety, payroll or pension policies in any jurisdiction in which the acquired business conducts its operations; and

- we may experience problems in retaining customers and integrating customer bases.

Many of these factors will be outside of our control and any one of them could result in increased costs, decreases in the amount of expected revenues and diversion of management's time and attention. They may also delay the realization of the benefits we anticipate when we enter into a transaction.

In order to conserve cash for operations, we may undertake acquisitions financed in part through public offerings or private placements of debt or equity securities, or other arrangements. Such acquisition financing could result in a decrease in our earnings and adversely affect other leverage measures. If we issue equity securities or equity-linked securities, the issued securities may have a dilutive effect on the interests of the holders of our common shares.

Failure to implement our acquisition strategy, including successfully integrating acquired businesses, could have an adverse effect on our business, financial condition and results of operations. Furthermore, we make strategic divestitures from time to time. In the case of divestitures, we may agree to indemnify acquiring parties for certain liabilities arising from our former businesses. These divestitures may also result in continued financial involvement in the divested businesses following the transaction, including through guarantees or other financial arrangements. Lower performance by those divested businesses could affect our future financial results.

Union disputes or other labor matters could adversely affect our operations and financial results.

Some of our employees are represented by labor unions in a number of countries under various collective bargaining agreements with varying durations and expiration dates. There can be no assurance that any current or future issues with our employees will be resolved or that we will not encounter future strikes, work stoppages or other disputes with labor unions or our employees. We may not be able to satisfactorily renegotiate collective bargaining agreements in the United States and other countries when they expire. If we fail to renegotiate our existing collective bargaining agreements, we could encounter strikes or work stoppages or other disputes with labor unions. In addition, existing collective bargaining agreements may not prevent a strike or work stoppage at our facilities in the future. We may also be subject to general country strikes or work stoppages unrelated to our business or collective bargaining agreements. A work stoppage or other limitations on production at our facilities for any reason could have an adverse effect on our business, results of operations and financial condition. In addition, many of our customers and suppliers have unionized work forces. Strikes or work stoppages experienced by our customers or suppliers could have an adverse effect on our business, results of operations and financial condition.

Unexpected events may increase our cost of doing business or disrupt our operations.

The occurrence of one or more unexpected events, including war, acts of terrorism or violence, civil unrest, fires, tornadoes, tsunamis, hurricanes, earthquakes, floods and other forms of severe weather in the United States or in other countries in which we operate or in which our suppliers are located could adversely affect our operations and financial performance. Natural disasters, pandemic illness, equipment failures, power outages or other unexpected events could result in physical damage to and complete or partial closure of one or more of our manufacturing facilities or distribution centers, temporary or long-term disruption in the supply of component products from some local and international suppliers, and disruption and delay in the transport of our products to dealers, end-users and distribution centers. Existing insurance coverage may not provide protection for all of the costs that may arise from such events.

FINANCIAL RISKS

Disruptions or volatility in global financial markets could limit our sources of liquidity, or the liquidity of our customers, dealers and suppliers.

Continuing to meet our cash requirements over the long-term requires substantial liquidity and access to varied sources of funds, including capital and credit markets. Global economic conditions may cause volatility and disruptions in capital and credit markets. Market volatility, changes in counterparty credit risk, the impact of government intervention in financial markets and general economic conditions may also adversely impact our ability to access capital and credit markets to fund operating needs. Global or regional economic downturns could cause financial markets to decrease the availability of liquidity, credit and credit capacity for certain issuers, including certain customers, dealers and suppliers. An inability to access capital and credit markets may have an adverse effect on our business, results of operations, financial condition and competitive position. Furthermore, changes in global economic conditions, including material cost increases and decreases in key markets we serve, and the success of plans to manage cost increases, inventory and other important elements of our business may significantly impact our ability to generate funds from operations.

In addition, demand for our products generally depends on customers' ability to pay for our products, which, in turn, depends on their access to funds. Changes in global economic conditions may result in customers experiencing increased difficulty in generating funds from operations. Capital and credit market volatility and uncertainty may cause financial institutions to revise their lending standards, resulting in customers' decreased access to capital. If capital and credit market volatility occurs, customers' liquidity may decline which, in turn, would reduce their ability to purchase our products.

Failure to maintain our credit ratings could increase our cost of borrowing and could adversely affect our cost of funds, liquidity, competitive position and access to capital markets.

Each of Caterpillar's and Cat Financial's costs of borrowing and their respective ability to access the capital markets are affected not only by market conditions but also by the short- and long-term credit ratings assigned to their respective debt by the major credit rating agencies. These ratings are based, in significant part, on each of Caterpillar's and Cat Financial's performance as measured by financial metrics such as net worth, profitability, interest coverage and leverage ratios, as well as transparency with rating agencies and timeliness of financial reporting. There can be no assurance that Caterpillar and Cat Financial will be able to maintain their credit ratings. We receive debt ratings from the major credit rating agencies. A downgrade of our credit rating by any of the major credit rating agencies could result in increased borrowing costs and could adversely affect Caterpillar's and Cat Financial's liquidity, competitive position and access to the capital markets, including restricting, in whole or in part, access to the commercial paper market. There can be no assurance that the commercial paper market will continue to be a reliable source of short-term financing for Cat Financial or an available source of short-term financing for Caterpillar. An inability to access the capital markets could have an adverse effect on our cash flow, results of operations and financial condition.

Our Financial Products segment is subject to risks associated with the financial services industry.

Cat Financial is significant to our operations and provides financing support for a significant share of our global sales. The inability of Cat Financial to access funds to support its financing activities to our customers could have an adverse effect on our business, results of operations and financial condition.

Continuing to meet Cat Financial's cash requirements over the long-term could require substantial liquidity and access to sources of funds, including capital and credit markets. Cat Financial has continued to maintain access to key global medium-term note and commercial paper markets, but there can be no assurance that such markets will continue to represent a reliable source of financing. If global economic conditions were to deteriorate, Cat Financial could face materially higher financing costs, become unable to access adequate funding to operate and grow its business and/or meet its debt service obligations as they mature. Cat Financial also could be required to draw upon contractually committed lending agreements and/or seek other funding sources. However, there can be no assurance that such agreements and other funding sources would be sufficient or even available under extreme market conditions. Any of these events could negatively impact Cat Financial's business, as well as our and Cat Financial's results of operations and financial condition.

Market disruption and volatility may also lead to numerous risks in connection with these events, including but not limited to:

- Market developments that may affect customer confidence levels and cause declines in the demand for financing and adverse changes in payment patterns, causing increases in delinquencies and default rates, which could increase Cat Financial's write-offs and provision for credit losses.
- The process Cat Financial uses to estimate losses inherent in its credit exposure requires a high degree of management's judgment regarding numerous subjective qualitative factors, including forecasts of economic conditions and how economic predictors might impair the ability of its borrowers to repay their loans. Financial market disruption and volatility may impact the accuracy of these judgments.
- Cat Financial's ability to engage in routine funding transactions or to borrow from other financial institutions on acceptable terms or at all could be adversely affected by disruptions in the capital markets or other events, including actions by rating agencies and deteriorating investor expectations.
- As Cat Financial's borrowing agreements are primarily with financial institutions, their ability to perform in accordance with any of our underlying agreements could be adversely affected by market volatility and/or disruptions in financial markets.

Changes in interest rates or market liquidity conditions could adversely affect Cat Financial's and our earnings and/or cash flow.

Changes in interest rates and market liquidity conditions could have an adverse impact on Cat Financial's and our earnings and cash flows. Changes in market interest rates may influence its and our borrowing costs, returns on financial investments and the valuation of derivative contracts. Because a significant number of the loans made by Cat Financial are made utilizing fixed interest rates, its business results are subject to fluctuations in interest rates. Certain loans made by Cat Financial and various financing extended to Cat Financial are made at variable rates that use floating reference rates or indices, including the Secured Overnight Financing Rate (SOFR) as a benchmark for establishing the interest rate.

Cat Financial manages interest rate and market liquidity risks through a variety of techniques that include a match funding strategy, the selective use of derivatives and a broadly diversified funding program. There can be no assurance, however, that fluctuations in interest rates and market liquidity conditions will not have an adverse impact on its and our earnings and cash flows. If any of the variety of instruments and strategies Cat Financial uses to hedge its exposure to these types of risk is ineffective, this may have an adverse impact on our earnings and cash flows. With respect to Insurance Services' investment activities, changes in equity and bond markets could result in a decline in value of its investment portfolio, resulting in an unfavorable impact to earnings.

An increase in delinquencies, repossessions or net losses of Cat Financial customers could adversely affect its results.

Inherent in the operation of Cat Financial is the credit risk associated with its customers. The creditworthiness of each customer and the rate of delinquencies, repossessions and net losses on customer obligations are directly impacted by several factors, including relevant industry and economic conditions, the availability of capital, the experience and expertise of the customer's management team, commodity prices, political events and the sustained value of the underlying collateral. Any increase in delinquencies, repossessions and net losses on customer obligations could have a material adverse effect on Cat Financial's and our earnings and cash flows. Cat Financial evaluates and adjusts its allowance for credit losses related to past due and non-performing receivables on a regular basis. However, adverse economic conditions or other factors that might cause deterioration of the financial health of its customers could change the timing and level of payments received and necessitate an increase in Cat Financial's estimated losses, which could also have a material adverse effect on Cat Financial's and our earnings and cash flows.

Currency exchange rate fluctuations affect our results of operations.

We conduct operations in many countries involving transactions denominated in a variety of currencies. We are subject to currency-exchange rate risk to the extent that our costs are denominated in currencies other than those in which we earn revenues. Fluctuations in currency exchange rates have had, and will continue to have, an impact on our results as expressed in U.S. dollars. There can be no assurance that currency exchange rate fluctuations will not adversely affect our results of operations, financial condition and cash flows. While the use of currency hedging instruments may provide us with protection from adverse fluctuations in currency exchange rates, by utilizing these instruments we potentially forego the benefits that might result from favorable fluctuations in currency exchange rates. In addition, our outlooks do not assume fluctuations in currency exchange rates. Adverse fluctuations in currency exchange rates from the date of our outlooks could cause our actual results to differ materially from those anticipated in any outlooks and adversely impact our business, results of operations and financial condition.

We also face risks arising from the imposition of exchange controls and currency devaluations. 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.

Restrictive covenants in our debt agreements could limit our financial and operating flexibility.

We maintain a number of credit facilities to support general corporate purposes (facilities) and have issued debt securities to manage liquidity and fund operations (debt securities). The agreements relating to a number of the facilities and the debt securities contain certain restrictive covenants applicable to us and certain subsidiaries, including Cat Financial. These covenants include maintaining a minimum consolidated net worth (defined as the consolidated shareholder's equity including preferred stock but excluding the pension and other post-retirement benefits balance within accumulated other comprehensive income (loss)), limitations on the incurrence of liens and sales and leaseback transactions, restrictions on the transfer of certain property and certain restrictions on consolidation and merger. Cat Financial has also agreed under certain of these agreements

not to exceed a certain leverage ratio (consolidated debt to consolidated net worth, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31), to maintain a minimum interest coverage ratio (calculated as (1) profit excluding income taxes, interest expense and net gain (loss) from interest rate derivatives to (2) interest expense calculated at the end of each fiscal quarter for the prior four consecutive fiscal quarter period) and not to terminate, amend or modify its support agreement with us.

A breach of one or more of the covenants could result in adverse consequences that could negatively impact our business, results of operations and financial condition. These consequences may include the acceleration of amounts outstanding under certain of the facilities, triggering of an obligation to redeem certain debt securities, termination of existing unused commitments by our lenders, refusal by our lenders to extend further credit under one or more of the facilities or to enter into new facilities or the lowering or modification of our credit ratings or those of one or more of our subsidiaries.

Sustained increases in funding obligations under our pension plans may impair our liquidity or financial condition.

We maintain certain defined benefit pension plans for our employees, which impose on us certain funding obligations. We use many assumptions in determining our future payment obligations under the plans. We employ a liability-driven investment strategy, where the interest rate sensitivity of the pension investments and pension obligations are aligned to reduce funded status volatility. Significant adverse changes in credit or capital markets could result in actual rates of return on pension investments being materially lower than projected and result in increased contribution requirements. These factors could significantly increase our payment obligations under the plans and, as a result, adversely affect our business and overall financial condition. We may be required to make material contributions to our pension plans in the future and may fund contributions through the use of cash on hand, the proceeds of borrowings, shares of our common stock or a combination of the foregoing, as permitted by applicable law.

LEGAL & REGULATORY RISKS

Our global operations are subject to a wide range of trade and anti-corruption laws and regulations.

Due to the international scope of our operations, we are subject to a complex system of import- and export-related laws and regulations. These include U.S. regulations issued by Customs and Border Protection, the Bureau of Industry and Security, the Office of Antiboycott Compliance, the Directorate of Defense Trade Controls and the Office of Foreign Assets Control, as well as the counterparts of these agencies in other countries. Any alleged or actual violations may subject us to increased government scrutiny, investigation and civil and criminal penalties, and may limit our ability to import or export our products or to provide services outside the United States. Furthermore, embargoes and sanctions imposed by the U.S. and other governments restricting or prohibiting sales to specific persons or countries or based on product classification may expose us to potential criminal and civil sanctions. We cannot predict the nature, scope or effect of future regulatory requirements to which our operations might be subject. We also cannot predict in certain locations the manner in which existing laws might be administered or interpreted.

In addition, the U.S. Foreign Corrupt Practices Act and similar foreign anti-corruption laws generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence foreign government officials for the purpose of obtaining or retaining business or obtaining an unfair advantage. Recent years have seen a substantial increase in the global enforcement of anti-corruption laws. Our operations outside the United States, including in developing countries, expose us to the risk of such violations. Violations of anti-corruption laws or regulations by our employees, intermediaries acting on our behalf, or our joint venture partners may result in severe criminal or civil sanctions. Violations may also disrupt our business, and may result in an adverse effect on our reputation, business and results of operations or financial condition.

International trade policies may impact demand for our products and our competitive position.

Government policies on international trade and investment such as import quotas, capital controls or tariffs, whether adopted by individual governments or addressed by regional trade blocs, can affect the demand for our products and services, impact the competitive position of our products or prevent us from being able to sell products in certain countries. The implementation of more restrictive trade policies (such as more detailed inspections, higher tariffs or new barriers to entry) in countries where we sell large quantities of products and services could negatively impact our business, results of operations and financial condition. For example, a government's adoption of "buy national" policies or retaliation by another government against such policies could have a negative impact on our results of operations.

We may incur additional tax expense or become subject to additional tax exposure.

We are subject to income taxes in the United States and numerous other jurisdictions. Our future results of operations could be adversely affected by changes in the effective tax rate as a result of a change in the mix of earnings between U.S. and non-U.S. jurisdictions or among jurisdictions with differing statutory tax rates. In addition, our future results of operations could also be adversely affected by changes in our overall profitability, changes in tax laws or treaties or in their application or interpretation, changes in tax rates, changes in generally accepted accounting principles, changes in the valuation of deferred tax assets and liabilities, changes in the amount of earnings indefinitely reinvested in certain non-U.S. jurisdictions, the results of audits and examinations of previously filed tax returns and continuing assessments of our tax exposures. We are also subject to the continuous examination of our income tax returns by the U.S. Internal Revenue Service and other tax authorities. We regularly assess the likelihood of an adverse outcome resulting from these examinations. If our effective tax rates were to increase, or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, our operating results, cash flows and financial condition could be adversely affected. For information regarding additional legal matters related to our taxes, please see Note 6 — “Income taxes” and Note 22 — “Environmental and legal matters” of Part II, Item 8 “Financial Statements and Supplementary Data” to this Annual Report on Form 10-K.

Costs associated with lawsuits or investigations or adverse rulings in enforcement or other legal proceedings may have an adverse effect on our results of operations.

We are subject to a variety of legal proceedings and legal compliance risks in virtually every part of the world. We face risk of exposure to various types of claims, lawsuits and government investigations. We are involved in various claims and lawsuits related to product design, manufacture and performance liability (including claimed asbestos exposure), contracts, employment issues, environmental matters, intellectual property rights, tax, securities and other legal proceedings that arise in and outside of the ordinary course of our business. The industries in which we operate are also periodically reviewed or investigated by regulators, which could lead to enforcement actions, fines and penalties or the assertion of private litigation claims. It is not possible to predict with certainty the outcome of claims, investigations and lawsuits, and we could in the future incur judgments, fines or penalties or enter into settlements of lawsuits and claims that could have an adverse effect on our reputation, business, results of operations or financial condition in any particular period.

The global and diverse nature of our operations means that legal and compliance risks will continue to exist and additional legal proceedings and other contingencies, the outcome of which cannot be predicted with certainty, may arise from time to time. In addition, subsequent developments in legal proceedings may affect our assessment and estimates of loss contingencies recorded as a reserve and require us to make payments in excess of our reserves. Such payments could have an adverse effect on our reputation, business and results of operations or financial condition.

New regulations or changes in financial services regulation could adversely impact Caterpillar and Cat Financial.

Cat Financial’s operations are highly regulated by governmental authorities in the locations where it operates, which can impose significant additional costs and/or restrictions on its business. In the United States, for example, certain Cat Financial activities are subject to the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), which includes extensive provisions regulating the financial services industry. As a result, Cat Financial has become and could continue to become subject to additional regulatory costs that could be significant and have an adverse effect on Cat Financial’s and our results of operations and financial condition. Changes in regulations or additional regulations in the United States or internationally impacting the financial services industry could also add significant cost or operational constraints that might have an adverse effect on Cat Financial’s and our results of operations and financial condition.

We are subject to stringent environmental laws and regulations that impose significant compliance costs.

Our facilities, operations and products are subject to increasingly stringent environmental laws and regulations globally, including laws and regulations governing emissions to noise, air, releases to soil and discharges to water and the generation, handling, storage, transportation, treatment and disposal of non-hazardous and hazardous waste materials. Some environmental laws impose strict, retroactive and joint and several liability for the remediation of the release of hazardous substances, even for conduct that was lawful at the time it occurred, or for the conduct of, or conditions caused by, prior operators, predecessors or other third parties. Failure to comply with environmental laws could expose us to penalties or clean-up costs, civil or criminal liability and sanctions on certain of our activities, as well as damage to property or natural resources. The potential liabilities, sanctions, damages and remediation efforts related to any non-compliance with such laws and regulations could negatively impact our ability to conduct our operations and our financial condition and results of operations. In addition, there can be no assurances that we will not be adversely affected by costs, liabilities or claims with respect to existing or subsequently acquired operations or under present laws and regulations or those that may be adopted or imposed in the future.

Environmental laws and regulations may change from time to time, as may related interpretations and other guidance. Changes in environmental laws or regulations could result in higher expenses and payments. Uncertainty relating to environmental laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights. Changes in environmental and climate change laws or regulations, including laws relating to greenhouse gas emissions, could lead to new or additional investment in product designs and could increase environmental compliance expenditures. Changes in climate change concerns, or in the regulation of such concerns, including greenhouse gas emissions, could subject us to additional costs and restrictions, including increased energy and raw materials costs. If environmental laws or regulations are either changed or adopted and impose significant operational restrictions and compliance requirements upon us or our products, they could negatively impact our reputation, business, capital expenditures, results of operations, financial condition and competitive position.

The Company's amended and restated bylaws provide that the Court of Chancery of the State of Delaware will be the exclusive forum for certain legal actions between the Company and its shareholders, which could discourage claims or limit the ability of the Company's shareholders to bring a claim in a judicial forum viewed by the shareholders as more favorable for disputes with the Company or the Company's directors, officers or other employees.

The Company's amended and restated bylaws provide to the fullest extent permitted by law that unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Company to the Company or the Company's shareholders, (iii) any action asserting a claim against the Company or any director or officer or other employee of the Company arising pursuant to any provision of the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws (as either may be amended from time to time) or (iv) any action asserting a claim against the Company or any director or officer or other employee of the Company governed by the internal affairs doctrine.

The exclusive forum provisions in our bylaws could limit our shareholders' ability to bring a claim in a judicial forum that it finds favorable for disputes with the Company or its directors, officers or other employees. Alternatively, if a court were to find the choice of forum provision contained in the Company's amended and restated bylaws to be inapplicable or unenforceable in an action, the Company may incur additional costs associated with resolving such action in other jurisdictions. The exclusive forum provision in the Company's amended and restated bylaws will not preclude or contract the scope of exclusive federal or concurrent jurisdiction for actions brought under the federal securities laws including the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, or the respective rules and regulations promulgated thereunder.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity

As required by Item 106 of Regulation S-K, the following sets forth information regarding our cybersecurity strategy, risk management and governance.

Cybersecurity Strategy and Risk Management

Cybersecurity is critical to advancing our overall objectives and enabling our digital efforts. As a global company, we face a wide variety of cybersecurity threats that range from common attacks such as ransomware and denial-of-service, to attacks from more advanced adversaries. Our customers, suppliers, and other partners face similar cybersecurity threats, and a cybersecurity incident impacting these entities could materially adversely affect our operations, performance and results. These cybersecurity threats and related risks make it imperative that we maintain focus on cybersecurity and systemic risks.

We maintain a comprehensive cybersecurity program which is integrated within the Company's enterprise risk management system and encompasses the corporate information technology and operational technology environments as well as customer-facing products. Our cybersecurity program has implemented a governance structure and process to identify, assess, manage, mitigate, respond to and report on cybersecurity risks. We utilize cybersecurity policies and frameworks based on industry and government standards. Our cyber risk management program controls are based on recognized best practices and standards, including the National Institute of Standards and Technology (NIST) Cyber Security Framework and the International Organization for Standardization (ISO 27001) Information Security Management System Requirements. We partner with third parties to support and evaluate our cybersecurity program. These third-party services span areas including cybersecurity maturity assessments, incident response, penetration testing, consulting on best practices, and others. We also consume threat intelligence from several paid and non-paid sources.

We maintain a 24 x 7 operations center which serves as a central location for the reporting of cybersecurity matters, provides monitoring of our global cybersecurity environment, and coordinates the investigation and remediation of alerts. As cybersecurity events occur, the cybersecurity team focuses on responding to and containing the threat and minimizing impact. In the event of an incident, the cybersecurity team assesses, among other factors, safety impact, supply chain and manufacturing disruption, data and personal information loss, business operations disruption, projected cost and potential for reputational harm, with participation from technical, legal and law enforcement support, as appropriate.

We have implemented a cybersecurity awareness program which covers topics such as phishing, social networking safety, password security and mobile device usage. We have mandatory training in the areas of cybersecurity, privacy, and confidential information handling. We also conduct regular phishing training and simulations for our employees and contractors. We provide extensive specialized role-based training to technical professionals in cybersecurity, secure application development, and other focus areas. We also conduct periodic tabletop exercises to validate our preparation for cyber events.

We operate a third-party cybersecurity program with the goal of minimizing disruption to the Company's business and production operations, strengthening supply chain resilience, and supporting the integrity of components and systems used in its products and services. We rely heavily on our supply chain to deliver our products and services to our customers, and a cybersecurity incident at a supplier, subcontractor or joint venture partner could materially adversely impact us. We assess third-party cybersecurity controls through a cybersecurity third-party risk assessment process. Identified deficiencies are addressed through a risk remediation process. For select suppliers, we engage third-party cybersecurity monitoring and alerting services, and seek to work directly with those suppliers to address potential deficiencies identified.

As of the date of this report, we do not believe that risks from any cybersecurity threats, including as a result of any previous cybersecurity incidents, have materially affected or are reasonably likely to affect us, including our business strategy, results of operations or financial condition. That said, as discussed more fully under Item 1A. "Risk Factors—Operational Risks—Increased information technology security threats and more sophisticated computer crime pose a risk to our systems, networks, products and services" of this Form 10-K, these threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Cybersecurity attacks could also include attacks targeting customer data or the security, integrity and/or reliability of the hardware and software installed in our products. It is possible that our information technology systems and networks, or those managed or provided by third parties, could have vulnerabilities, which could go unnoticed for a period of time. While various procedures and controls have been and are being utilized to mitigate such risks, there can be no guarantee that the actions and controls we have implemented and are implementing, or which we cause or have caused third-party service providers to implement, will be sufficient to protect and mitigate associated risks to our systems, information or other property.

Cybersecurity Governance

Caterpillar's board has oversight for risk management with a focus on the most significant risks facing the Company, including strategic, operational, financial and legal compliance risks. The board's risk oversight process builds upon management's risk assessment and mitigation processes, which include an enterprise risk management program of which our cybersecurity processes are an integral component.

The board implements its risk oversight function both as a board and through delegation to board committees, which meet regularly and report back to the board. The board has delegated the oversight of specific risks to board committees that align with their functional responsibilities. The Audit Committee (the “AC”) assists the board in overseeing the enterprise risk management program and evaluates and monitors risks related to, among other things, the Company’s information security program. The AC assesses cybersecurity and information technology risks and the controls implemented to monitor and mitigate these risks. The Company’s Chief Information Officer & Senior Vice President, Caterpillar IT (the “CIO”) attends all bimonthly AC meetings and provides cybersecurity updates to the AC and board.

Our cybersecurity program is overseen by our CIO, who has been a Caterpillar employee for over twenty-five years. Prior to her current appointment as our CIO in September 2020, she was the Chief Information Officer for the Company’s Financial Products Division. Her extensive background in IT includes global leadership for large-scale systems transformations, cybersecurity, cloud and application management, global data center management, worldwide network, servers and storage, database management and end-user services. Our CIO leads a cross-functional cybersecurity team comprised of professionals from our product, cybersecurity, legal and compliance organizations who focus on managing the security of our connected solutions. This team manages the Company’s global IT systems, IT risk management, cybersecurity, global infrastructure and IT transformations.

Item 1D. Information about our Executive Officers.

Name and age	Present Caterpillar Inc. position and date of initial election	Principal positions held during the past five years and/or Caterpillar Inc. position most recently held
D. James Umpleby III (66)	Chairman of the Board (2018) and Chief Executive Officer (2017)	Group President (2013-2016)
Andrew R.J. Bonfield (62)	Chief Financial Officer (2018)	Group Chief Financial Officer for a multinational electricity and gas utility company (2010-2018)
Bob De Lange (55)	Group President (2017)	Vice President (2015-2016), Worldwide Product Manager, Medium Wheel Loaders, (2013-2014)
Denise C. Johnson (58)	Group President (2016)	Vice President (2012-2016)
Joseph E. Creed (49)	Chief Operating Officer (2023)	Group President (2021-2023), Vice President, Oil & Gas and Marine Division (2019-2020), Interim Chief Financial Officer (2018), Vice President, Finance Services Division (2017), Group Chief Financial Officer, Energy and Transportation (2013-2016)
Anthony D. Fassino (54)	Group President (2021)	Vice President, Building Construction Products (2018-2020), Director of Worldwide Forestry Products (2016-2018)
Derek R. Owens (51)	Chief Legal Officer and General Counsel (2023)	Senior Vice President (2023), Deputy General Counsel (2021-2023), Associate General Counsel, Litigation & Investigations (2019-2021), Assistant United States Attorney, U.S. Attorney's Office of the Department of Justice (2005-2019)
Cheryl H. Johnson (64)	Chief Human Resources Officer (2017)	Executive Vice President of Human Resources for a global multi-industry aerospace, defense and industrial manufacturing company (2012-2017)
William E. Schaupp (53)	Vice President and Chief Accounting Officer (2022)	Finance Director, Global Finance Services Division (2021-2022), Vice President and Controller and Chief Accounting Officer of PPG Industries, Inc. (2018-2021)
Jason E. Kaiser (47)	Group President (2024)	Senior Vice President, Electric Power Division (2021-2023), General Manager, Electric Power Division (2019-2021), Product Manager, Electric Power Division (2016-2019)

Item 2. Properties.

General Information

Caterpillar's operations are highly integrated. Although the majority of our plants are involved primarily in production relating to our Construction Industries, Resource Industries or Energy & Transportation segments, several plants are involved in manufacturing relating to more than one business segment. In addition, several plants reported in our financial statements under the All Other Segment are involved in the manufacturing of components that are used in the assembly of products for more than one business segment. Caterpillar's parts distribution centers are involved in the storage and distribution of parts for Construction Industries, Resource Industries and Energy & Transportation. The research and development activities carried on at our Technical Centers in Aurora and Mossville, Illinois involve products for Construction Industries, Resource Industries and Energy & Transportation.

We believe the properties we own to be generally well maintained and adequate for present use. Through planned capital expenditures, we expect these properties to remain adequate for future needs. Properties we lease are covered by leases expiring over terms of generally one to ten years. We do not anticipate any difficulty in retaining occupancy of any leased facilities, either by renewing leases prior to expiration or by replacing them with equivalent leased facilities.

Headquarters and Other Key Offices

Our corporate headquarters is in a leased office located in Irving, Texas. Our Financial Products business is headquartered in Nashville, Tennessee. Additional key offices are located inside and outside the United States.

Technical Center, Training Centers, Demonstration Areas and Proving Grounds

We operate Technical Centers located in Aurora and Mossville, Illinois; Wuxi, China; and Chennai, India. Our demonstration centers are located in Tinaja Hills, Arizona; Edwards, Illinois; Chichibu, Japan and Malaga, Spain. We have various other technical and training centers, demonstration areas and proving grounds located both inside and outside the United States.

Parts Distribution Centers

Distribution of our parts is conducted from parts distribution centers inside and outside the United States. We operate parts distribution centers in the following locations: Arvin, California; Denver, Colorado; Miami, Florida; Atlanta, Georgia; Morton, Illinois; St. Paul, Minnesota; Clayton, Ohio; York, Pennsylvania; Waco, Texas; Spokane, Washington; Melbourne, Australia; Queensland, Australia; Grimbergen, Belgium; Piracicaba, Brazil; Shanghai, China; Sagami, Japan; San Luis Potosi, Mexico; Singapore, Republic of Singapore; Johannesburg, South Africa; and Dubai, United Arab Emirates. We also own or lease other facilities that support our distribution activities.

Remanufacturing and Components

Remanufacturing of our products is reported in our Energy & Transportation segment and is conducted primarily at the facilities in the following locations: Franklin, Indiana; Bogor, Indonesia; Corinth, Mississippi; Prentiss County, Mississippi; West Fargo, North Dakota; Piracicaba, Brazil; Shanghai, China; and Nuevo Laredo, Mexico.

Component manufacturing is reported in the All Other Segment and is conducted primarily at facilities in the following locations: East Peoria, Illinois; Mapleton, Illinois; Peoria, Illinois; Bogor, Indonesia; Menominee, Michigan; Boonville, Missouri; West Plains, Missouri; Goldsboro, North Carolina; Sumter, South Carolina; Tianjin, China; Xuzhou, China; Atessa, Italy; Bazzano, Italy; Frosinone, Italy; San Eusebio, Italy; Ramos Arizpe, Mexico; Pyeongtaek, South Korea; and Skinningrove, United Kingdom.

We also lease or own other facilities that support our remanufacturing and component manufacturing activities.

Manufacturing

Manufacturing of products for our Construction Industries, Resource Industries and Energy & Transportation segments is conducted primarily at the locations listed below. These facilities are believed to be suitable for their intended purposes, with adequate capacities for current and projected needs for existing products.

Our principal manufacturing facilities include those used by the following segments in the following locations:

Segment	U.S. Facilities	Facilities Outside the U.S.
Construction Industries	Arkansas: North Little Rock Georgia: Athens Illinois: Decatur, East Peoria Kansas: Wamego Minnesota: Brooklyn Park North Carolina: Clayton, Sanford Texas: Victoria	Brazil: Campo Largo, Piracicaba China: Suzhou, Wujiang, Xuzhou, Qingzhou France: Grenoble, Echirolles Hungary: Godollo India: Hosur, Thiruvallur Italy: Minerbio, Cattolica Japan: Akashi Mexico: Torreon Netherlands: Den Bosch Poland: Janow, Sosnowiec Thailand: Rayong United Kingdom: Desford, Stockton
Resource Industries	Illinois: Decatur, East Peoria South Carolina: Sumter Texas: Denison Wisconsin: South Milwaukee	China: Qingzhou, Wuxi India: Thiruvallur Indonesia: Batam Mexico: Acuna, Monterrey, Reynosa Thailand: Rayong United Kingdom: Peterlee
Energy & Transportation	Alabama: Albertville, Montgomery California: San Diego Georgia: Griffin, Patterson Illinois: East Peoria, Mossville, Mapleton, Pontiac Indiana: Lafayette, Muncie Kentucky: Decoursey, Mayfield Oklahoma: Broken Arrow North Carolina: Winston-Salem Texas: Channelview, DeSoto, Fort Worth, Mabank, San Antonio, Schertz, Seguin, Sherman	Australia: Cardiff, Perth, Redbank, Revesby Brazil: Curitiba, Piracicaba, Sete Lagoas China: Tianjin, Wuxi Czech Republic: Zatec, ZebraK Germany: Kiel, Mannheim, Rostock India: Aurangabad, Hosur Italy: Pistoia Mexico: San Luis Potosi, Tijuana United Kingdom: Larn, Peterborough, Sandiacre, South Queensferry, Springvale, Stafford, Wimborne

Item 3. Legal Proceedings.

Certain legal proceedings in which we are involved are discussed in Note 22 — "Environmental and legal matters" of Part II, Item 8 "Financial Statements and Supplementary Data" and should be considered an integral part of Part I, Item 3 "Legal Proceedings", which is hereby incorporated by reference.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

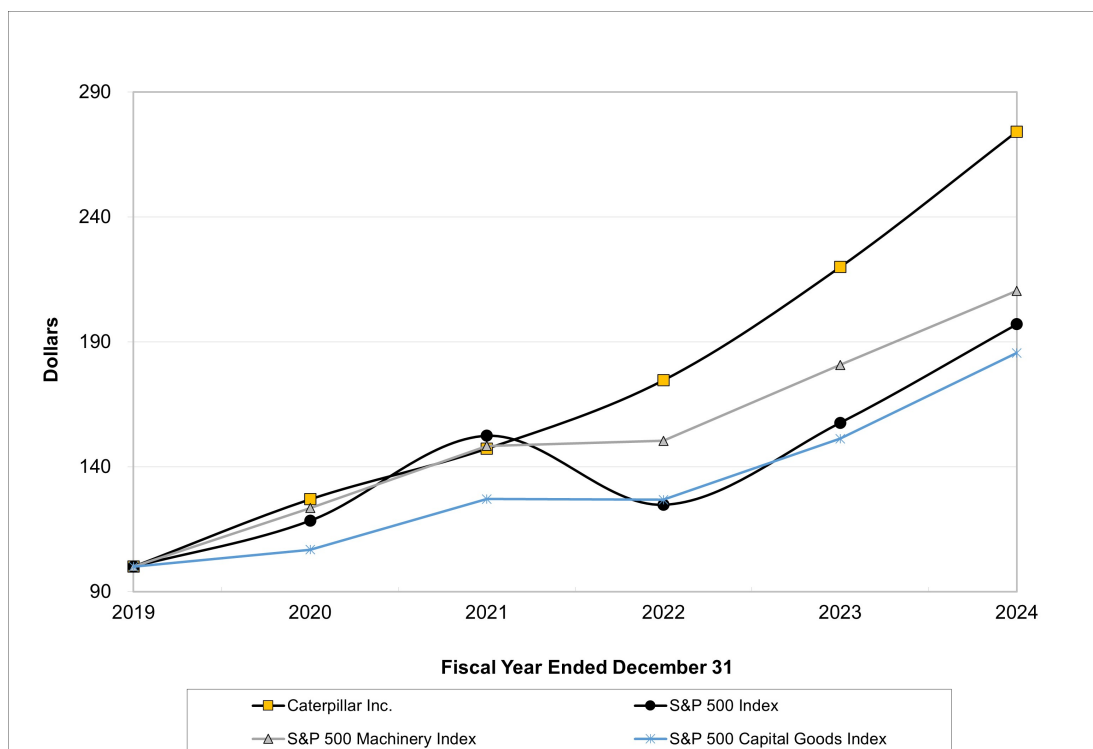
Common Stock (NYSE: CAT)

Listing Information: Caterpillar common stock is listed on the New York Stock Exchange in the United States.

Number of Shareholders: Shareholders of record at the end of 2024 totaled 20,191, compared with 21,217 at the end of 2023.

Performance Graph: Total Cumulative Shareholder Return for Five-Year Period Ending December 31, 2024

The graph below shows the cumulative shareholder return assuming an investment of \$100 on December 31, 2019, and reinvestment of dividends issued thereafter.



	2019	2020	2021	2022	2023	2024
Caterpillar Inc.	\$ 100.00	\$ 126.97	\$ 147.22	\$ 174.60	\$ 219.91	\$ 274.14
S&P 500	\$ 100.00	\$ 118.40	\$ 152.39	\$ 124.79	\$ 157.59	\$ 197.02
S&P 500 Machinery	\$ 100.00	\$ 123.42	\$ 148.30	\$ 150.38	\$ 180.74	\$ 210.36
S&P 500 Capital Goods	\$ 100.00	\$ 106.78	\$ 127.01	\$ 126.73	\$ 151.22	\$ 185.50

Non-U.S. Employee Stock Purchase Plans

As of December 31, 2024, we had 38 employee stock purchase plans (the “EIP Plans”) administered outside the United States for our non-U.S. employees, which had approximately 16,000 active participants in the aggregate. During the fourth quarter of 2024, approximately 57,000 shares of Caterpillar common stock were purchased by the EIP Plans pursuant to the terms of such plans.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Approximate Dollar Value of Shares that May Yet be Purchased under the Program (in billions) ¹
October 1-31, 2024	4,152,554	\$ 344.55	4,152,554 ²	\$ 20.538
November 1-30, 2024	510,721	\$ 391.52	510,721	\$ 20.338
December 1-31, 2024	549,782	\$ 381.95	549,782	\$ 20.128
Total	5,213,057	\$ 353.10	5,213,057	

¹ In May 2022, the Board approved a share repurchase authorization (the 2022 Authorization) of up to \$15.0 billion of Caterpillar common stock effective August 1, 2022, with no expiration. In June 2024, the Board approved an additional share repurchase authorization (the 2024 Authorization) of up to \$20.0 billion of Caterpillar common stock, effective June 12, 2024, with no expiration. As of December 31, 2024, approximately \$20.1 billion remained available under the 2024 and 2022 Authorizations.

² Includes shares acquired pursuant to the accelerated share repurchase agreements entered into during the first and second quarters of 2024, each of which settled in October 2024.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to provide information that will assist the reader in understanding the company's Consolidated Financial Statements, the changes in certain key items in those financial statements between select periods and the primary factors that accounted for those changes. In addition, we discuss how certain accounting principles, policies and critical estimates affect our Consolidated Financial Statements. Our discussion also contains certain forward-looking statements related to future events and expectations. This MD&A should be read in conjunction with our discussion of cautionary statements and significant risks to the company's business under Item 1A. Risk Factors of the 2024 Form 10-K.

Highlights for the full-year 2024 include:

- Sales and revenues for 2024 were \$64.809 billion, a decrease of \$2.251 billion, or 3 percent, compared with \$67.060 billion for 2023. In the three primary segments, sales were lower in **Construction Industries** and **Resource Industries** and higher in **Energy & Transportation**.
- Operating profit as a percent of sales and revenues was 20.2 percent in 2024, compared with 19.3 percent in 2023. **Adjusted operating profit margin** was 20.7 percent in 2024, compared with 20.5 percent in 2023.
- Profit per share for 2024 was \$22.05, and excluding the items in the table below, **adjusted profit per share** was \$21.90. Profit per share for 2023 was \$20.12, and excluding the items in the table below, adjusted profit per share was \$21.21.
- In order for our results to be more meaningful to our readers, we have separately quantified the impact of several significant items. A detailed reconciliation of GAAP to non-GAAP financial measures is included on pages 47 - 48.

	Full Year 2024		Full Year 2023	
	Profit Before Taxes	Profit Per Share	Profit Before Taxes	Profit Per Share
(Dollars in millions except per share data)				
Profit	\$ 13,373	\$ 22.05	\$ 13,050	\$ 20.12
Restructuring (income) costs - divestitures of certain non-U.S. entities	164	0.22	—	—
Other restructuring (income) costs	195	0.32	194	0.30
Pension/OPEB mark-to-market (gains) losses	(154)	(0.23)	(97)	(0.14)
Tax law change related to currency translation	—	(0.46)	—	—
Restructuring costs - Longwall divestiture	—	—	586	1.14
Deferred tax valuation allowance adjustments	—	—	—	(0.21)
Adjusted profit	<u>\$ 13,578</u>	<u>\$ 21.90</u>	<u>\$ 13,733</u>	<u>\$ 21.21</u>

- Enterprise operating cash flow was \$12.0 billion in 2024. Caterpillar ended 2024 with \$6.9 billion of enterprise cash.

OVERVIEW

Total sales and revenues for 2024 were \$64.809 billion, a decrease of \$2.251 billion, or 3 percent, compared with \$67.060 billion for 2023. The decrease reflected lower **sales volume**, partially offset by favorable **price realization**. Lower sales volume was primarily driven by lower sales of equipment to end users. Profit per share was \$22.05 in 2024, compared with profit per share of \$20.12 in 2023. Profit was \$10.792 billion in 2024, compared with \$10.335 billion in 2023. The profit impact of lower sales volume was more than offset by favorable price realization and the absence of the impact of the divestiture of the company's Longwall business in 2023.

Trends and Economic Conditions

Outlook for Key End Markets

Our results continue to reflect the benefit of the diversity of our end markets.

In Construction Industries, we expect moderately lower sales of equipment to end users in North America in 2025 compared to 2024. Construction spend in North America remains healthy, primarily driven by large, multi-year projects and government-related infrastructure investments supported by funding from the Infrastructure Investment and Jobs Act (IIJA). Although we anticipate the combined non-residential and residential construction spend in 2025 to remain similar to 2024 levels, our current planning assumptions reflect lower demand for new equipment in 2025 as compared to 2024. We also expect lower dealer rental fleet loading in 2025 compared to 2024, although dealer rental revenue is expected to grow. We remain positive about the medium- and long-term outlook in North America. In Asia Pacific, outside of China, we expect soft economic conditions to

continue into 2025. We anticipate China to remain at relatively low levels for the excavator industry above 10-tons. In **EAME**, we anticipate that weak economic conditions in Europe will continue, and we anticipate a healthy level of construction activity in Africa and in the Middle East in 2025. Construction activity in **Latin America** is expected to moderately decline in 2025 as compared to 2024. We also anticipate the ongoing benefit of our **services** initiatives will positively impact Construction Industries in 2025.

In Resource Industries, we anticipate lower sales of equipment to end users in 2025 compared to 2024, partially offset by higher services revenues, including robust rebuild activity. Customers continue to display capital discipline, although key commodities remain above investment thresholds. Customer product utilization remains high, the number of parked trucks remains relatively low, the age of the fleet remains elevated, and our autonomous solutions continue to see strong customer acceptance. We continue to believe the energy transition will support increased commodity demand over time, expanding our total addressable market and providing further opportunities for long-term profitable growth.

In Energy & Transportation, demand is expected to remain strong in Power Generation, as we expect growth for both reciprocating engines and turbines and turbine-related services in 2025 as compared to 2024. Overall strength in Power Generation, for both prime and backup power applications, continues to be driven by increasing energy demands to support data center growth related to cloud computing and generative artificial intelligence (AI). Through continued focus on improving manufacturing efficiencies, along with initial stages of our investment to increase large engine output capability, we expect growth in reciprocating engines for Power Generation in 2025. We also expect growth in turbines and turbine-related services for Power Generation, driven by increased customer demand. For Oil and Gas, we expect moderate growth in 2025 as compared to 2024. We expect reciprocating engines and services to be slightly down in 2025 due to continuing capital discipline by our customers, industry consolidation and efficiency improvements in our customers' operations. We expect growth for turbines and turbine-related services in Oil & Gas in 2025 as compared to 2024. For turbines and turbine-related services used in Oil & Gas applications, backlog remains strong, and we see continued healthy order and inquiry activity. Demand for products in Industrial applications in 2025 is expected to remain at a relatively low level, similar to 2024. In Transportation, we anticipate growth in 2025, driven by rail services.

Full-Year 2025 Company Trends and Expectations

For the full-year 2025, we anticipate sales and revenues will be slightly lower compared to 2024, primarily driven by lower sales volume and unfavorable price realization. We expect lower sales in Construction Industries and Resource Industries to be partially offset by higher sales in Energy & Transportation. Currently, we do not anticipate a significant change in machine **dealer inventories** in 2025. Services revenues increased in 2024, and we expect services revenues to grow across all three primary segments in 2025.

For Construction Industries, we expect lower sales, including unfavorable price realization. In Resource Industries, we anticipate slightly lower sales, driven by unfavorable price realization and slightly lower sales volume. In Energy and Transportation, we expect an increase in sales driven by higher sales volume and favorable price realization.

In 2025, we anticipate unfavorable price realization and higher depreciation costs. We expect Other income (expense) to be unfavorable in 2025 as compared to 2024, primarily due to lower interest income as well as the absence of favorable foreign currency impacts. We do not anticipate translation movements in our expectations. In 2025, we expect restructuring costs of approximately \$150 million to \$200 million and expect capital expenditures of about \$2.5 billion. We anticipate the annual effective tax rate, excluding discrete items, to be 23.0 percent in 2025.

First-Quarter 2025 Company Trends and Expectations

In the first quarter of 2025, we expect lower sales and revenues as compared to the first quarter of 2024, primarily due to the unfavorable impact from changes in machine dealer inventories and unfavorable machine price realization. We expect machine dealer inventory to increase less during the first quarter of 2025 as compared to the \$1.1 billion increase in the first quarter of 2024.

In a typical year, we see our lowest sales of the year in the first quarter. In 2025, we anticipate that trend to continue but be more pronounced as sales in the first quarter should account for a lower percentage of full year sales than is typical, mainly due to our expectations for changes in dealer inventories and price realization for machines. In Energy & Transportation, we expect normal seasonality with sales growing throughout the year.

In the first quarter of 2025 as compared to the first quarter of 2024, we anticipate lower sales in Construction Industries primarily due to lower sales of equipment to end users, an unfavorable impact from changes in dealer inventories and unfavorable price realization. In Resource Industries, we expect lower sales primarily due to lower sales volume and unfavorable price realization. In Energy & Transportation, we anticipate similar sales in the first quarter of 2025 as compared to the first quarter of 2024, as continued strength in Power Generation is expected to be offset by lower sales in Oil & Gas and in Transportation. We expect favorable price realization for Energy & Transportation in the first quarter of 2025.

In the first quarter of 2025, we expect the profit impact from lower machine sales volume and unfavorable machine price realization to be partially offset by favorable price realization in Energy & Transportation. In Construction Industries and in Resource Industries, we expect an unfavorable profit impact from lower sales volume and unfavorable price realization in the first quarter of 2025 as compared to the first quarter of 2024. In Energy & Transportation, we expect unfavorable **manufacturing costs** and the impact of an unfavorable mix of products to be partially offset by favorable price realization.

Global Business Conditions

We continue to monitor a variety of external factors around the world, such as supply chain disruptions, inflationary cost and labor pressures. Areas of particular focus include transportation, certain components and raw materials. We continue to work to minimize supply chain challenges that may impact our ability to meet customer demand. We continue to assess the environment to determine if additional actions need to be taken.

Risk Factors

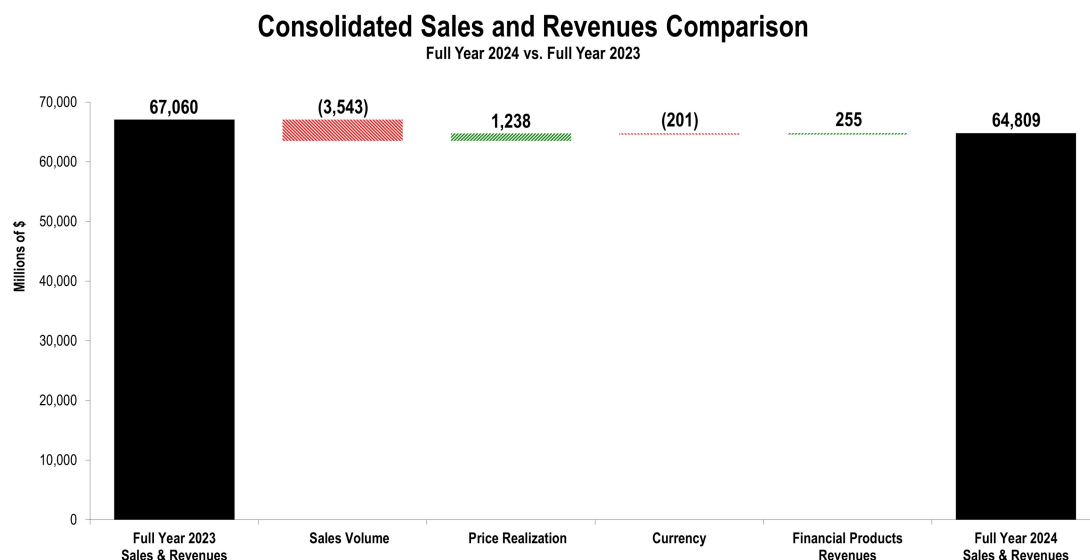
Risk factors are disclosed within Item 1A. Risk Factors of the 2024 Form 10-K.

Notes:

- Glossary of terms included on pages 35 - 37; first occurrence of terms shown in bold italics.
- Information on non-GAAP financial measures is included on pages 47 - 48.
- Some amounts within this report are rounded to the millions or billions and may not add. In addition, the sum of the components reported across periods may not equal the total amount reported year-to-date due to rounding.

2024 COMPARED WITH 2023

CONSOLIDATED SALES AND REVENUES



The chart above graphically illustrates reasons for the change in consolidated sales and revenues between 2023 (at left) and 2024 (at right). Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees.

Total sales and revenues for 2024 were \$64.809 billion, a decrease of \$2.251 billion, or 3 percent, compared with \$67.060 billion in 2023. The decrease was primarily driven by lower sales volume of \$3.543 billion, partially offset by favorable price realization of \$1.238 billion. The decrease in sales volume was mainly driven by lower sales of equipment to end users. In addition, changes in dealer inventories had an unfavorable impact to sales volume. Dealer inventory increased less during 2024 than during 2023.

In the three primary segments, sales were lower in Construction Industries and Resource Industries and higher in Energy & Transportation.

North America sales decreased 1 percent primarily due to lower sales volume, partially offset by favorable price realization. The decrease in sales volume was mainly due to the impact from changes in dealer inventories. Dealer inventory increased less during 2024 than during 2023.

Sales increased 1 percent in Latin America. Unfavorable currency impacts related to the Brazilian real were more than offset by higher sales volume and favorable price realization. The increase in sales volume was primarily due to the impact from changes in dealer inventories. Dealer inventory increased during 2024, compared to a decrease during 2023.

EAME sales decreased 10 percent primarily due lower sales volume. The decrease in sales volume was mainly driven by lower sales of equipment to end users.

Asia/Pacific sales decreased 6 percent primarily due to lower sales volume. The decrease in sales volume was mainly driven by the impact from changes in dealer inventories. Dealer inventory decreased in 2024, compared to an increase in 2023.

Total dealer inventory increased about \$400 million during 2024, compared to an increase of about \$2.1 billion during 2023. Machine dealer inventory decreased about \$700 million during 2024, compared to an increase of \$700 million during 2023. Dealers are independent, and the reasons for changes in their inventory levels vary, including their expectations of future demand and product delivery times. Dealers' demand expectations take into account seasonal changes, macroeconomic conditions, machine rental rates and other factors. Delivery times can vary based on availability of product from Caterpillar factories and product distribution centers. We do not expect a significant change in machine dealer inventories in 2025.

Sales and Revenues by Segment

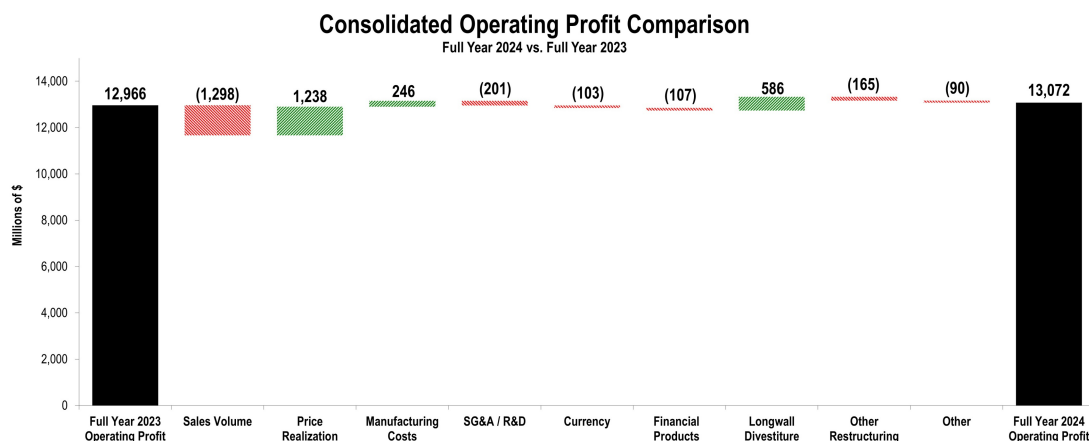
(Millions of dollars)	2023	Sales Volume	Price Realization	Currency	Inter-Segment/Other	2024	\$ Change	% Change
Construction Industries	\$ 27,418	\$ (1,737)	\$ (70)	\$ (143)	\$ (13)	\$ 25,455	\$ (1,963)	(7 %)
Resource Industries	13,583	(1,603)	405	(28)	32	12,389	(1,194)	(9 %)
Energy & Transportation	28,001	(142)	900	(25)	120	28,854	853	3 %
<i>All Other Segment</i>	449	(17)	5	(1)	(11)	425	(24)	(5 %)
Corporate Items and Eliminations	(5,582)	(44)	(2)	(4)	(128)	(5,760)	(178)	
Machinery, Energy & Transportation	63,869	(3,543)	1,238	(201)	—	61,363	(2,506)	(4 %)
Financial Products Segment	3,785	—	—	—	268	4,053	268	7 %
Corporate Items and Eliminations	(594)	—	—	—	(13)	(607)	(13)	
Financial Products Revenues	3,191	—	—	—	255	3,446	255	8 %
Consolidated Sales and Revenues	\$ 67,060	\$ (3,543)	\$ 1,238	\$ (201)	\$ 255	\$ 64,809	\$ (2,251)	(3 %)

Sales and Revenues by Geographic Region

(Millions of dollars)	North America		Latin America		EAME		Asia/Pacific		External Sales and Revenues		Inter-Segment		Total Sales and Revenues	
	\$	% Chg	\$	% Chg	\$	% Chg	\$	% Chg	\$	% Chg	\$	% Chg	\$	% Chg
2024														
Construction Industries	\$ 14,576	(5%)	\$ 2,553	11%	\$ 4,315	(18%)	\$ 3,900	(11%)	\$ 25,344	(7%)	\$ 111	(10%)	\$ 25,455	(7 %)
Resource Industries	4,561	(13%)	2,077	2%	1,804	(13%)	3,576	(8%)	12,018	(9%)	371	9%	12,389	(9 %)
Energy & Transportation	13,005	9%	1,763	(11%)	5,787	(2%)	3,533	2%	24,088	3%	4,766	3%	28,854	3 %
All Other Segment	56	(14%)	—	100%	12	(33%)	50	2%	118	(10%)	307	(3%)	425	(5 %)
Corporate Items and Eliminations	(150)		(6)		(25)		(24)		(205)		(5,555)		(5,760)	
Machinery, Energy & Transportation	32,048	(1%)	6,387	1%	11,893	(10%)	11,035	(6%)	61,363	(4%)	—	—%	61,363	(4 %)
Financial Products Segment	2,702	11%	402	(3%)	505	3%	444	1%	4,053	¹ 7%	—	—%	4,053	7 %
Corporate Items and Eliminations	(353)		(81)		(82)		(91)		(607)		—		(607)	
Financial Products Revenues	2,349	12%	321	(5%)	423	4%	353	1%	3,446	8%	—	—%	3,446	8 %
Consolidated Sales and Revenues	\$ 34,397	(1%)	\$ 6,708	1%	\$ 12,316	(10%)	\$ 11,388	(6%)	\$ 64,809	(3%)	\$ —	—%	\$ 64,809	(3 %)
2023														
Construction Industries	\$ 15,343		\$ 2,307		\$ 5,254		\$ 4,390		\$ 27,294		\$ 124		\$ 27,418	
Resource Industries	5,256		2,040		2,069		3,879		13,244		339		13,583	
Energy & Transportation	11,982		1,983		5,929		3,461		23,355		4,646		28,001	
All Other Segment	65		(1)		18		49		131		318		449	
Corporate Items and Eliminations	(133)		(3)		(5)		(14)		(155)		(5,427)		(5,582)	
Machinery, Energy & Transportation	32,513		6,326		13,265		11,765		63,869		—		63,869	
Financial Products Segment	2,440		416		491		438		3,785	¹	—		3,785	
Corporate Items and Eliminations	(347)		(77)		(83)		(87)		(594)		—		(594)	
Financial Products Revenues	2,093		339		408		351		3,191		—		3,191	
Consolidated Sales and Revenues	\$ 34,606		\$ 6,665		\$ 13,673		\$ 12,116		\$ 67,060		\$ —		\$ 67,060	

¹ Includes revenues from Machinery, Energy & Transportation of \$711 million and \$690 million in 2024 and 2023, respectively.

CONSOLIDATED OPERATING PROFIT



The chart above graphically illustrates reasons for the change in consolidated operating profit between 2023 (at left) and 2024 (at right). Caterpillar management utilizes these charts internally to visually communicate with the company's board of directors and employees. The bar entitled Other includes *consolidating adjustments* and *Machinery, Energy & Transportation other operating (income) expenses*.

Operating profit was \$13.072 billion in 2024, an increase of \$106 million, or 1 percent, compared with \$12.966 billion in 2023. The profit impact of lower sales volume of \$1.298 billion, higher selling, general and administrative (SG&A) and research and development (R&D) expenses of \$201 million, and higher restructuring costs of \$165 million were more than offset by favorable price realization of \$1.238 billion, the absence of the impact of the divestiture of the company's Longwall business in 2023 of \$586 million and favorable manufacturing costs of \$246 million. The increase in SG&A/R&D expenses was primarily driven by investments aligned with strategic initiatives. Favorable manufacturing costs largely reflected lower freight.

For the twelve months ended December 31, 2024, restructuring costs increased primarily due to the divestitures of certain non-U.S. entities.

Operating profit margin was 20.2 percent in 2024, compared with 19.3 percent in 2023.

Profit (Loss) by Segment

(Millions of dollars)	2024	2023	\$ Change	% Change
Construction Industries	\$ 6,165	\$ 6,975	\$ (810)	(12 %)
Resource Industries	2,533	2,834	(301)	(11 %)
Energy & Transportation	5,736	4,936	800	16 %
All Other Segment	48	18	30	167 %
Corporate Items and Eliminations	(1,384)	(2,104)	720	
Machinery, Energy & Transportation	13,098	12,659	439	3 %
Financial Products Segment	932	909	23	3 %
Corporate Items and Eliminations	(327)	14	(341)	
Financial Products	605	923	(318)	(34 %)
Consolidating Adjustments	(631)	(616)	(15)	
Consolidated Operating Profit	\$ 13,072	\$ 12,966	\$ 106	1 %

Other Profit/Loss and Tax Items

- Interest expense excluding Financial Products in 2024 was \$512 million, compared with \$511 million in 2023.
- Other income (expense) in 2024 was income of \$813 million, compared with income of \$595 million in 2023. The change was primarily driven by favorable foreign currency impacts, favorable impacts from *pension and other postemployment benefit (OPEB)* plan costs and higher mark-to-market gains for remeasurement of pension and OPEB plans.
- The effective tax rate for 2024 was 19.7 percent compared to 21.3 percent for 2023. Excluding the discrete items discussed below, the annual effective tax rate was 22.2 percent for 2024 compared to 21.4 percent for 2023. The increase from 2023 was primarily related to changes in the geographic mix of profits from a tax perspective.

In 2024, the company recorded a discrete tax benefit of \$224 million for a tax law change related to currency translation. The 2024 annual effective tax rate excludes the impact of losses of \$164 million for the divestitures of certain non-U.S. entities with related tax benefits of \$54 million. The 2023 annual effective tax rate excludes the impact of the nondeductible loss of \$586 million related to the divestiture of the company's Longwall business. The company also recorded a tax charge of \$43 million related to \$154 million of mark-to-market gains for remeasurement of pension and OPEB plans in 2024, compared to a tax charge of \$26 million related to \$97 million of mark-to-market gains in 2023. In 2024, the company recorded discrete tax benefits of \$47 million to reflect changes in estimates related to prior years. In addition, a discrete tax benefit of \$57 million was recorded in 2024 and 2023 for the settlement of stock-based compensation awards with associated tax deductions in excess of cumulative U.S. GAAP compensation expense. In 2023, the company recorded a discrete tax benefit of \$88 million due to a change in the valuation allowance for certain non-U.S. deferred tax assets.

Construction Industries

Construction Industries' total sales were \$25.455 billion in 2024, a decrease of \$1.963 billion, or 7 percent, compared with \$27.418 billion in 2023. The decrease was primarily due to lower sales volume. The decrease in sales volume was mainly driven by lower sales of equipment to end users.

- In North America, sales decreased due to lower sales volume. Lower sales volume was primarily driven by the impact from changes in dealer inventories. Dealer inventory increased less during 2024 than during 2023.
- Sales increased in Latin America primarily due to higher sales volume, partially offset by unfavorable price realization and unfavorable currency impacts primarily related to the Brazilian real. Higher sales volume was mainly driven by the impact from changes in dealer inventories. Dealer inventory increased during 2024, compared with a decrease during 2023.
- In EAME, sales decreased primarily due to lower sales volume. Lower sales volume was mainly due to lower sales of equipment to end users.
- Sales decreased in Asia/Pacific primarily due to lower sales volume and unfavorable currency impacts, primarily related to the Japanese yen. Lower sales volume was mainly driven by the impact from changes in dealer inventories. Dealer inventory decreased during 2024, compared with an increase during 2023.

Construction Industries' profit was \$6.165 billion in 2024, a decrease of \$810 million, or 12 percent, compared with \$6.975 billion in 2023. The decrease was mainly due to the profit impact of lower sales volume.

Construction Industries' profit as a percent of total sales was 24.2 percent in 2024, compared with 25.4 percent in 2023.

Resource Industries

Resource Industries' total sales were \$12.389 billion in 2024, a decrease of \$1.194 billion, or 9 percent, compared with \$13.583 billion in 2023. The decrease was primarily due to lower sales volume, partially offset by favorable price realization. Sales volume decreased primarily due to lower sales of equipment to end users.

Resource Industries' profit was \$2.533 billion in 2024, a decrease of \$301 million, or 11 percent, compared with \$2.834 billion in 2023. The decrease was mainly due to the profit impact of lower sales volume of \$655 million, partially offset by favorable price realization of \$405 million.

Resource Industries' profit as a percent of total sales was 20.4 percent for 2024, compared with 20.9 percent for 2023.

Energy & Transportation

Sales by Application

(Millions of dollars)	2024	2023	\$ Change	% Change
Oil and Gas	\$ 6,980	\$ 6,988	\$ (8)	—%
Power Generation	7,756	6,362	1,394	22 %
Industrial	3,990	4,871	(881)	(18 %)
Transportation	5,362	5,134	228	4 %
External Sales	24,088	23,355	733	3 %
Inter-Segment	4,766	4,646	120	3 %
Total Sales	\$ 28,854	\$ 28,001	\$ 853	3 %

Energy & Transportation's total sales were \$28.854 billion in 2024, an increase of \$853 million, or 3 percent, compared with \$28.001 billion in 2023. The increase was primarily due to favorable price realization.

- Oil and Gas – Sales were about flat. Decreased sales in reciprocating engines used in well servicing applications were offset by increased sales in reciprocating engines used in gas compression applications and increased sales for turbines and turbine-related services.
- Power Generation – Sales increased in large reciprocating engines, primarily data center applications. Turbines and turbine-related services increased as well.
- Industrial – Sales decreased in EAME and North America.
- Transportation – Sales increased in marine and rail services, partially offset by lower sales of reciprocating engine aftermarket parts.

Energy & Transportation's profit was \$5.736 billion in 2024, an increase of \$800 million, or 16 percent, compared with \$4.936 billion in 2023. The increase was mainly due to favorable price realization.

Energy & Transportation's profit as a percent of total sales was 19.9 percent in 2024, compared with 17.6 percent in 2023.

Financial Products Segment

Financial Products' segment revenues were \$4.053 billion in 2024, an increase of \$268 million, or 7 percent, compared with \$3.785 billion in 2023. The increase was primarily due to a favorable impact from higher average financing rates across all regions of \$153 million and a favorable impact from higher average *earning assets* of \$127 million driven by North America.

Financial Products' segment profit was \$932 million in 2024, an increase of \$23 million, or 3 percent, compared with \$909 million in 2023. The increase was mainly due to a favorable impact from higher average earning assets of \$54 million, an insurance settlement of \$33 million, and a favorable impact from equity securities of \$32 million. These favorable impacts were partially offset by an increase in SG&A expenses of \$54 million and an unfavorable impact from returned or repossessed equipment of \$34 million.

Corporate Items and Eliminations

Expense for corporate items and eliminations was \$1.711 billion in 2024, a decrease of \$379 million from 2023, primarily driven by the absence of the divestiture of the company's Longwall business in 2023, partially offset by unfavorable impacts of segment reporting methodology differences.

2023 COMPARED WITH 2022

For discussions related to the consolidated sales and revenue and consolidated operating profit between 2023 and 2022, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations of the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2023, which was filed with the United States Securities and Exchange Commission on February 16, 2024 and hereby incorporated by reference.

RESTRUCTURING COSTS

In 2025, we expect to incur about \$150 million to \$200 million of restructuring costs. We expect that prior restructuring actions will result in an incremental benefit to operating costs, primarily Costs of goods sold and SG&A expenses, of about \$25 million in 2025 compared with 2024.

Additional information related to restructuring costs is included in Note 24 — "Restructuring income/costs" of Part II, Item 8 "Financial Statements and Supplemental Data."

GLOSSARY OF TERMS

1. **Adjusted Operating Profit Margin** – Operating profit excluding restructuring income/costs as a percent of sales and revenues.
2. **Adjusted Profit Per Share** – Profit per share excluding restructuring income/costs, a discrete tax benefit for a tax law change related to currency translation, pension and OPEB mark-to-market gains/losses and certain deferred tax valuation allowance adjustments in 2023.
3. **All Other Segment** – Primarily includes activities such as: business strategy; product management and development; manufacturing and sourcing of wear and maintenance components primarily for Cat® products; parts distribution; integrated logistics solutions; distribution services responsible for dealer development and administration, including a wholly owned dealer in Japan; dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; brand management and marketing strategy; and digital investments for new customer and dealer solutions that integrate data analytics with state-of-the-art digital technologies while transforming the buying experience.
4. **Consolidating Adjustments** – Elimination of transactions between Machinery, Energy & Transportation and Financial Products.
5. **Construction Industries** – A segment primarily responsible for supporting customers using machinery in infrastructure and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes asphalt pavers; backhoe loaders; cold planers; compactors; compact track loaders; forestry machines; material handlers; motor graders; pipelayers; road reclaimers; skid steer loaders; telehandlers; track-type loaders; track-type tractors (small, medium); track excavators (mini, small, medium, large); wheel excavators; wheel loaders (compact, small, medium); and related parts and work tools.
6. **Corporate Items and Eliminations** – Includes corporate-level expenses, timing differences (as some expenses are reported in segment profit on a cash basis), methodology differences between segment and consolidated external reporting, certain restructuring costs and inter-segment eliminations.
7. **Currency** – With respect to sales and revenues, currency represents the translation impact on sales resulting from changes in foreign currency exchange rates versus the U.S. dollar. With respect to operating profit, currency represents the net translation impact on sales and operating costs resulting from changes in foreign currency exchange rates versus the U.S. dollar. Currency only includes the impact on sales and operating profit for the Machinery, Energy & Transportation line of business; currency impacts on Financial Products revenues and operating profit are included in the Financial Products portions of the respective analyses. With respect to other income/expense, currency represents the effects of forward and option contracts entered into by the company to reduce the risk of fluctuations in exchange rates (hedging) and the net effect of changes in foreign currency exchange rates on our foreign currency assets and liabilities for consolidated results (translation).
8. **Dealer Inventories** – Represents dealer machine and engine inventories, excluding aftermarket parts.
9. **EAME** – A geographic region including Europe, Africa, the Middle East and Eurasia.
10. **Earning Assets** – Assets consisting primarily of total finance receivables net of unearned income, plus equipment on operating leases net of accumulated depreciation at Cat Financial.
11. **Energy & Transportation** – A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related services across industries serving Oil and Gas, Power Generation, Industrial and Transportation applications, including marine- and rail-related businesses as well as product support of on-highway engines. Responsibilities include business strategy, product design, product management, development and testing, manufacturing, marketing and sales and product support. The product and services portfolio includes turbines, centrifugal gas compressors, and turbine-related services; reciprocating engine-powered generator sets; integrated systems

and solutions used in the electric power generation industry; reciprocating engines, drivetrain and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines, drivetrain and integrated systems and solutions supplied to the industrial industry as well as Caterpillar machines; electrified powertrain and zero-emission power sources and service solutions development; and diesel-electric locomotives and components and other rail-related products and services, including remanufacturing and leasing. Responsibilities also include the remanufacturing of Caterpillar reciprocating engines and components and remanufacturing services for other companies.

12. **Financial Products** – The company defines Financial Products as our finance and insurance subsidiaries, primarily Caterpillar Financial Services Corporation (Cat Financial) and Caterpillar Insurance Holdings Inc. (Insurance Services). Financial Products’ information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment.
13. **Financial Products Segment** – Provides financing alternatives to customers and dealers around the world for Caterpillar products and services, as well as financing for power generation facilities that, in most cases, incorporate Caterpillar products. Financing plans include operating and finance leases, revolving charge accounts, installment sale contracts, repair/rebuild financing, working capital loans and wholesale financing plans. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage and maintenance plans for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of Caterpillar equipment. The segment also earns revenues from Machinery, Energy & Transportation, but the related costs are not allocated to operating segments. Financial Products’ segment profit is determined on a pretax basis and includes other income/expense items.
14. **Latin America** – A geographic region including Central and South American countries and Mexico.
15. **Machinery, Energy & Transportation (ME&T)** – The company defines ME&T as Caterpillar Inc. and its subsidiaries, excluding Financial Products. ME&T’s information relates to the design, manufacturing and marketing of its products.
16. **Machinery, Energy & Transportation Other Operating (Income) Expenses** – Comprised primarily of gains/losses on disposal of long-lived assets, gains/losses on divestitures and legal settlements and accruals.
17. **Manufacturing Costs** – Manufacturing costs exclude the impacts of currency and represent the volume-adjusted change for variable costs and the absolute dollar change for period manufacturing costs. Variable manufacturing costs are defined as having a direct relationship with the volume of production. This includes material costs, direct labor and other costs that vary directly with production volume, such as freight, power to operate machines and supplies that are consumed in the manufacturing process. Period manufacturing costs support production but are defined as generally not having a direct relationship to short-term changes in volume. Examples include machinery and equipment repair, depreciation on manufacturing assets, facility support, procurement, factory scheduling, manufacturing planning and operations management.
18. **Mark-to-market gains/losses** – Represents the net gain or loss of actual results differing from the company’s assumptions and the effects of changing assumptions for our defined benefit pension and OPEB plans. These gains and losses are immediately recognized through earnings upon the annual remeasurement in the fourth quarter, or on an interim basis as triggering events warrant remeasurement.
19. **Pension and Other Postemployment Benefits (OPEB)** – The company’s defined-benefit pension and postretirement benefit plans.
20. **Price Realization** – The impact of net price changes excluding currency and new product introductions. Price realization includes geographic mix of sales, which is the impact of changes in the relative weighting of sales prices between geographic regions.
21. **Resource Industries** – A segment primarily responsible for supporting customers using machinery in mining, heavy construction and quarry and aggregates. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors; large mining trucks; hard rock vehicles; electric rope shovels; draglines; hydraulic shovels; rotary drills; large wheel loaders; off-highway trucks; articulated trucks; wheel tractor scrapers; wheel dozers; landfill compactors; soil compactors; wide-body trucks; select work tools; machinery components; electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics, autonomous machine capabilities, safety services and mining performance solutions. Resource Industries also manages areas that provide services to other parts of the company, including strategic procurement, lean center of excellence, integrated manufacturing, research and development for hydraulic systems, automation, electronics and software for Caterpillar machines and engines.

22. **Restructuring income/costs** – May include costs for employee separation, long-lived asset impairments, contract terminations and (gains)/losses on divestitures. These costs are included in Other operating (income) expenses except for defined-benefit plan curtailment losses and special termination benefits, which are included in Other income (expense). Restructuring costs also include other exit-related costs, which may consist of accelerated depreciation, inventory write-downs, building demolition, equipment relocation and project management costs and LIFO inventory decrement benefits from inventory liquidations at closed facilities, all of which are primarily included in Cost of goods sold.
23. **Sales Volume** – With respect to sales and revenues, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation as well as the incremental sales impact of new product introductions, including emissions-related product updates. With respect to operating profit, sales volume represents the impact of changes in the quantities sold for Machinery, Energy & Transportation combined with product mix as well as the net operating profit impact of new product introductions, including emissions-related product updates. Product mix represents the net operating profit impact of changes in the relative weighting of Machinery, Energy & Transportation sales with respect to total sales. The impact of sales volume on segment profit includes inter-segment sales.
24. **Services** – Machinery, Energy & Transportation services revenues include, but are not limited to, aftermarket parts and other service-related revenues and exclude most Financial Products revenues, discontinued products and captive dealer services.

LIQUIDITY AND CAPITAL RESOURCES

Sources of funds

We generate significant capital resources from operating activities, which are the primary source of funding for our ME&T operations. Funding for these businesses is also available from commercial paper and long-term debt issuances. Financial Products' operations are funded primarily from commercial paper, term debt issuances and collections from its existing portfolio. During 2024, we had positive operating cash flow within both our ME&T and Financial Products' operations. On a consolidated basis, we ended 2024 with \$6.89 billion of cash, a decrease of \$89 million from year-end 2023. In addition, ME&T invests in available-for-sale debt securities and bank time deposits that are considered highly liquid and are available for current operations. These ME&T securities were \$1.98 billion as of December 31, 2024 and are included in Prepaid expenses and other current assets and Other assets in the Consolidated Statement of Financial Position. We intend to maintain a strong cash and liquidity position.

Consolidated operating cash flow for 2024 was \$12.04 billion, down \$850 million compared to 2023. The decrease was primarily due to changes in accrued wages, salaries, and employee benefits, and higher cash taxes paid. These were partially offset by lower working capital requirements. Within working capital, changes in accounts payable, customer advances, and receivables favorably impacted cash flow, partially offset by changes in accrued expenses.

Total debt as of December 31, 2024 was \$38.41 billion, an increase of \$531 million from year-end 2023. Debt related to ME&T decreased \$893 million in 2024. Debt related to Financial Products increased by \$1.54 billion due to portfolio funding requirements.

As of December 31, 2024, we had three global credit facilities with a syndicate of banks totaling \$10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and Cat Financial for general liquidity purposes. Based on management's allocation decision, which can be revised from time to time, the portion of the Credit Facility available to ME&T as of December 31, 2024 was \$2.75 billion. Information on our Credit Facility is as follows:

- In August 2024, we entered into a new 364-day facility. The 364-day facility of \$3.15 billion (of which \$825 million is available to ME&T) expires in August 2025.
- In August 2024, we amended and extended the three-year facility (as amended and restated, the "three-year facility"). The three-year facility of \$2.73 billion (of which \$715 million is available to ME&T) expires in August 2027.
- In August 2024, we amended and extended the five-year facility (as amended and restated, the "five-year facility"). The five-year facility of \$4.62 billion (of which \$1.21 billion is available to ME&T) expires in August 2029.

At December 31, 2024, Caterpillar's consolidated net worth was \$19.56 billion, which was above the \$9.00 billion required under the Credit Facility. The consolidated net worth is defined as the consolidated shareholders' equity including preferred stock but excluding the pension and other postretirement benefits balance within AOCI.

At December 31, 2024, Cat Financial's covenant interest coverage ratio was 1.41 to 1. This was above the 1.15 to 1 minimum ratio, calculated as (1) profit excluding income taxes, interest expense and net gain/(loss) from interest rate derivatives to (2) interest expense calculated at the end of each fiscal quarter for the prior four consecutive fiscal quarter period, required by the Credit Facility.

In addition, at December 31, 2024, Cat Financial's six-month covenant leverage ratio was 7.25 to 1 and year-end covenant leverage ratio was 7.37 to 1. This was below the maximum ratio of debt to net worth of 10 to 1, calculated (1) on a monthly basis as the average of the leverage ratios determined on the last day of each of the six preceding calendar months and (2) at each December 31, required by the Credit Facility.

In the event Caterpillar or Cat Financial does not meet one or more of their respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of Cat Financial's other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At December 31, 2024, there were no borrowings under the Credit Facility.

The aforementioned financial covenants are being reported as calculated under the Credit Facility and not pursuant to U.S. GAAP. Please refer to the credit agreements governing the Credit Facility filed as an exhibit to our periodic reports for further information related to the calculation thereof. For risks related to our indebtedness and compliance with these covenants, please refer to the risk factor "Restrictive covenants in our debt agreements could limit our financial and operating flexibility" set forth in Part I, Item 1A of this Form 10-K.

Our total credit commitments and available credit as of December 31, 2024 were:

(Millions of dollars)	December 31, 2024		
	Consolidated	Machinery, Energy & Transportation	Financial Products
Credit lines available:			
Global credit facilities	\$ 10,500	\$ 2,750	\$ 7,750
Other external	4,062	610	3,452
Total credit lines available	14,562	3,360	11,202
Less: Commercial paper outstanding	(3,946)	—	(3,946)
Less: Utilized credit	(687)	—	(687)
Available credit	\$ 9,929	\$ 3,360	\$ 6,569

The other consolidated credit lines with banks as of December 31, 2024 totaled \$4.06 billion. These committed and uncommitted credit lines, which may be eligible for renewal at various future dates or have no specified expiration date, are used primarily by our subsidiaries for local funding requirements. Caterpillar or Cat Financial may guarantee subsidiary borrowings under these lines.

We receive debt ratings from the major credit rating agencies. Fitch maintains a "high-A" debt rating, while Moody's and S&P maintain a "mid-A" debt rating. A downgrade of our credit ratings by any of the major credit rating agencies could result in increased borrowing costs and could make access to certain credit markets more difficult. In the event economic conditions deteriorate such that access to debt markets becomes unavailable, ME&T's operations would rely on cash flow from operations, use of existing cash balances, borrowings from Cat Financial and access to our committed credit facilities. Our Financial Products' operations would rely on cash flow from its existing portfolio, existing cash balances, access to our committed credit facilities and other credit line facilities of Cat Financial, and potential borrowings from Caterpillar. In addition, we maintain a support agreement with Cat Financial, which requires Caterpillar to remain the sole owner of Cat Financial and may, under certain circumstances, require Caterpillar to make payments to Cat Financial should Cat Financial fail to maintain certain financial ratios.

We facilitate voluntary supplier finance programs (the “Programs”) through participating financial institutions. We account for the payments made under the Programs, the same as our other accounts payable, as a reduction to our cash flows from operations. We do not believe that changes in the availability of the Programs will have a significant impact on our liquidity. Additional information related to the Programs is included in Note 19 — “Supplier finance programs” of Part II, Item 8 “Financial Statements and Supplementary Data”.

Material cash requirements for contractual obligations

We believe our balances of cash and cash equivalents of \$6.89 billion and available-for-sale debt securities of \$1.98 billion as of December 31, 2024, along with cash generated by ongoing operations and continued access to debt markets, will be sufficient to satisfy our cash requirements over the next 12 months and beyond.

We have committed cash outflows related to postretirement benefit obligations, long-term debt and operating lease agreements. See Notes 12, 14 and 20, respectively, of Part II, Item 8 “Financial Statements and Supplementary Data” for additional information.

We have short-term obligations related to the purchase of goods and services made in the ordinary course of business. These consist of invoices received and recorded as liabilities as of December 31, 2024, but scheduled for payment in 2025 of \$7.68 billion. In addition, we have contractual obligations for material and services on order at December 31, 2024, but not yet invoiced or delivered, of \$6.69 billion.

We also have long-term contractual obligations primarily for logistics services agreements; systems support, software licenses and development contracts; information technology consulting contracts; outsourcing contracts for benefit plan administration and long-term commitments entered into with key suppliers for minimum purchase quantities. These obligations total \$1.63 billion, with \$762 million due in the next 12 months.

Machinery, Energy & Transportation

Net cash provided by operating activities was \$11.44 billion in 2024, compared with \$11.69 billion in 2023. The decrease was primarily due to changes in accrued wages, salaries, and employee benefits, higher cash taxes paid, and changes in other liabilities. These were partially offset by decreased working capital requirements. Within working capital, changes in receivables, accounts payable, and customer advances favorably impacted cash flow partially offset by changes in accrued expenses.

Net cash provided by investing activities in 2024 was \$133 million, compared with net cash used of \$3.92 billion in 2023. The change was due to lower new investments in securities and higher proceeds from maturities and sale of securities, primarily due to time deposit maturities in 2024.

Net cash used for financing activities during 2024 was \$11.42 billion, compared with \$7.65 billion in 2023. The change was primarily due to higher payments to repurchase shares and debt repayments in 2024.

While our short-term priorities for the use of cash may vary from time to time as business needs and conditions dictate, our long-term cash deployment strategy is focused on the following priorities. Our top priority is to maintain a strong financial position in support of a mid-A rating. Next, we intend to fund operational requirements and commitments. Then, we intend to fund priorities that profitably grow the company and return capital to shareholders through dividend growth and share repurchases. Additional information on cash deployment is as follows:

Strong financial position — Our top priority is to maintain a strong financial position in support of a mid-A rating. We track a diverse group of financial metrics that focus on liquidity, leverage, cash flow and margins which align with our cash deployment actions and the various methodologies used by the major credit rating agencies.

Operational excellence and commitments — Capital expenditures were \$1.99 billion during 2024, compared to \$1.66 billion in 2023. We expect ME&T’s capital expenditures in 2025 to be about \$2.5 billion. We made \$271 million of contributions to our pension and OPEB plans during 2024. In comparison, we made \$361 million of contributions to our pension and OPEB plans in 2023. We expect to make approximately \$354 million of contributions to our pension and OPEB plans in 2025.

Fund strategic growth initiatives and return capital to shareholders — We intend to utilize our liquidity and debt capacity to fund targeted investments that drive long-term profitable growth focused in the areas of expanded offerings, services and sustainability, including acquisitions.

As part of our capital allocation strategy, ME&T free cash flow is a liquidity measure we use to determine the cash generated and available for financing activities including debt repayments, dividends and share repurchases. We define ME&T free cash flow as cash from ME&T operations less capital expenditures, excluding discretionary pension and other postretirement benefit plan contributions. A goal of our capital allocation strategy is to return substantially all ME&T free cash flow to shareholders over time in the form of dividends and share repurchases, while maintaining our mid-A rating.

Each quarter, our Board of Directors reviews the company's dividend for the applicable quarter. The Board evaluates the financial condition of the company and considers corporate cash flow, the company's liquidity needs, the economic outlook, and the health and stability of global credit markets to determine whether to maintain or change the quarterly dividend. In December 2024, the Board of Directors approved maintaining our quarterly dividend representing \$1.41 per share, and we continue to expect our strong financial position to support the dividend. Dividends paid totaled \$2.65 billion in 2024.

Our share repurchase plans are subject to the company's cash deployment priorities and are evaluated on an ongoing basis considering the financial condition of the company, corporate cash flow, the company's liquidity needs, the economic outlook, and the health and stability of global credit markets. The timing and amount of future repurchases may vary depending on market conditions and investing priorities. In May 2022, the Board approved a share repurchase authorization (the 2022 Authorization) of up to \$15.0 billion of Caterpillar common stock effective August 1, 2022 with no expiration. In June 2024, the Board approved an additional share repurchase authorization (the 2024 Authorization) of up to \$20.0 billion of Caterpillar common stock, effective June 12, 2024, with no expiration. In 2024, we repurchased \$7.7 billion of Caterpillar common stock, with \$20.1 billion remaining under the 2022 and 2024 Authorizations as of December 31, 2024. Caterpillar's basic shares outstanding as of December 31, 2024 were approximately 478 million.

Financial Products

Net cash provided by operating activities was \$1.45 billion in 2024, compared with \$1.11 billion in 2023. Net cash used for investing activities was \$2.79 billion in 2024, compared with \$1.42 billion used in 2023. The change was primarily due to portfolio related activity and the divestiture of a non-U.S. entity. Net cash provided by financing activities was \$1.21 billion in 2024, compared with net cash provided of \$278 million in 2023. The change was primarily due to higher net inflows from external borrowings partially offset by higher dividends paid to Caterpillar in 2024.

Off-balance sheet arrangements

We are a party to certain off-balance sheet arrangements, primarily in the form of guarantees. Information related to guarantees appears in Note 21 — "Guarantees and product warranty" of Part II, Item 8 "Financial Statements and Supplementary Data."

RECENT ACCOUNTING PRONOUNCEMENTS

For a discussion of recent accounting pronouncements, see Note 1J — "New accounting guidance" of Part II, Item 8 "Financial Statements and Supplementary Data."

CRITICAL ACCOUNTING ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect reported amounts. The more significant estimates include: residual values for leased assets, fair values for goodwill impairment tests, warranty liability, reserves for product liability and insurance losses, postretirement benefits, post-sale discounts, credit losses and income taxes. We have incorporated many years of data into the determination of each of these estimates and we have not historically experienced significant adjustments. We review these assumptions at least annually with the Audit Committee of the Board of Directors. Following are the methods and assumptions used in determining our estimates and an indication of the risks inherent in each.

Residual values for leased assets — We determine the residual value of Cat Financial's leased equipment based on its estimated end-of-term market value. We estimate the residual value of leased equipment at the inception of the lease based on a number of factors, including historical wholesale market sales prices, past remarketing experience and any known significant

market/product trends. We also consider the following critical factors in our residual value estimates: lease term, market size and demand, total expected hours of usage, machine configuration, application, location, model changes, quantities, third-party residual guarantees and contractual customer purchase options.

Upon termination of the lease, the equipment is either purchased by the lessee or sold to a third-party, in which case we may record a gain or a loss for the difference between the estimated residual value and the sale proceeds.

During the term of our leases, we monitor residual values. For operating leases, we record adjustments to depreciation expense reflecting changes in residual value estimates prospectively on a straight-line basis. For finance leases, we recognize residual value adjustments through a reduction of finance revenue over the remaining lease term.

We evaluate the carrying value of equipment on operating leases for potential impairment when we determine a triggering event has occurred. When a triggering event occurs, we perform a test for recoverability by comparing projected undiscounted future cash flows to the carrying value of the equipment on operating leases. If the test for recoverability identifies a possible impairment, we measure the fair value of the equipment on operating leases in accordance with the fair value measurement framework. We recognize an impairment charge for the amount by which the carrying value of the equipment on operating leases exceeds its estimated fair value.

At December 31, 2024, the aggregate residual value of equipment on operating leases was \$1.55 billion. Without consideration of other factors such as third-party residual guarantees or contractual customer purchase options, a 10 percent non-temporary decrease in the market value of our equipment subject to operating leases would reduce residual value estimates and result in the recognition of approximately \$70 million of additional annual depreciation expense.

Fair values for goodwill impairment tests — We test goodwill for impairment annually, at the reporting unit level, and whenever events or circumstances make it more likely than not that an impairment may have occurred, such as a significant adverse change in the business climate or a decision to sell all or a portion of a reporting unit. We perform our annual goodwill impairment test as of October 1 and monitor for interim triggering events on an ongoing basis.

We review goodwill for impairment utilizing either a qualitative assessment or a quantitative goodwill impairment test. If we choose to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. For reporting units where we perform the quantitative goodwill impairment test, we compare the fair value of each reporting unit, which we primarily determine using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeds its carrying value, we do not consider the goodwill impaired. If the carrying value is higher than the fair value, we recognize the difference as an impairment loss.

For reporting units where we perform a quantitative goodwill impairment test, the process requires valuation of the respective reporting unit, which we primarily determine using an income approach based on a discounted five year forecasted cash flow with a year-five residual value. We compute the residual value using the constant growth method, which values the forecasted cash flows in perpetuity. The assumptions about future cash flows and growth rates are based on each reporting unit's long-term forecast and are subject to review and approval by senior management. A reporting unit's discount rate is a risk-adjusted weighted average cost of capital, which we believe approximates the rate from a market participant's perspective. The estimated fair value could be impacted by changes in market conditions, interest rates, growth rates, tax rates, costs, pricing and capital expenditures. We categorize the fair value determination as Level 3 in the fair value hierarchy due to its use of internal projections and unobservable measurement inputs.

We completed our annual assessment of goodwill in the fourth quarter of 2024 and determined that there was no impairment of goodwill. Caterpillar's market capitalization has remained significantly above the net book value of the Company.

An unfavorable change in our expectations for the financial performance of our reporting units, particularly long-term growth and profitability, would reduce the fair value of our reporting units. The demand for our equipment and related parts is highly cyclical and significantly impacted by commodity prices, although the impact may vary by reporting unit. The energy and mining industries are major users of our products, including the mineral extraction, oil and natural gas industries. Decisions to purchase our products are dependent upon the performance of those industries, which in turn are dependent in part on commodity prices. Lower commodity prices or industry specific circumstances that have a negative impact to the valuation assumptions may reduce the fair value of our reporting units. Should such events occur and it becomes more likely than not that a reporting unit's fair value has fallen below its carrying value, we will perform an interim goodwill impairment test(s), in addition to the annual impairment test. Future impairment tests may result in a goodwill impairment, depending on the outcome of the quantitative impairment test. We would report a goodwill impairment as a non-cash charge to earnings.

Product warranty liability — At the time we recognize a sale, we record estimated future warranty costs. We determine the product warranty liability by applying historical claim rate experience to the current field population and dealer inventory. Generally, we base historical claim rates on actual warranty experience for each product by machine model/engine size by customer or dealer location (inside or outside North America). We develop specific rates for each product shipment month and update them monthly based on actual warranty claim experience. Warranty costs may differ from those estimated if actual claim rates are higher or lower than our historical rates.

Product liability and insurance loss reserve — We determine these reserves based upon reported claims in process of settlement and actuarial estimates for losses incurred but not reported. Loss reserves, including incurred but not reported reserves, are based on estimates, and ultimate settlements may vary significantly from such estimates due to increased claims frequency or severity over historical levels. The amount of these reserves totaled \$1.5 billion and \$1.4 billion at December 31, 2024 and 2023, respectively. The majority of the balance in both 2024 and 2023 consisted of unearned insurance premiums.

Postretirement benefits — We sponsor defined benefit pension plans and/or other postretirement benefit plans (retirement healthcare and life insurance) to employees in many of our locations throughout the world. There are assumptions used in the accounting for these defined benefit plans that include discount rate, expected return on plan assets, expected rate of compensation increase, the future health care trend rate, mortality and other economic and demographic assumptions. The actuarial assumptions we use may change or differ significantly from actual results, which may result in a material impact to our consolidated financial statements.

The effects of actual results differing from our assumptions and the effects of changing assumptions are considered actuarial gains or losses. We utilize a mark-to-market approach in recognizing actuarial gains or losses immediately through earnings upon the annual remeasurement in the fourth quarter, or on an interim basis as triggering events warrant remeasurement.

Primary actuarial assumptions were determined as follows:

- We use the assumed discount rate to discount future benefit obligations back to today's dollars. The U.S. discount rate is based on a benefit cash flow-matching approach and represents the rate at which our benefit obligations could effectively be settled as of our measurement date, December 31. The benefit cash flow-matching approach involves analyzing Caterpillar's projected cash flows against a high quality bond yield curve, calculated using a wide population of corporate Aa bonds available on the measurement date. We use a similar approach to determine the assumed discount rate for our most significant non-U.S. plans. In estimating the service and interest cost components of net periodic benefit cost, we utilize a full yield curve approach in determining a discount rate. This approach applies the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. Discount rates are sensitive to changes in interest rates.
- The expected long-term rate of return on plan assets is based on our estimate of long-term returns for equities and fixed income securities weighted by the allocation of our plan assets. This rate is impacted by changes in general market conditions, but because it represents a long-term rate, it is not significantly impacted by short-term market swings. Changes in our allocation of plan assets would also impact this rate. For example, a shift to more fixed income securities would lower the rate. The expected return on plan assets is based on the fair value of plan asset allocations as of our measurement date, December 31.
- We use the expected rate of compensation increase to develop benefit obligations using projected pay at retirement. It represents average long-term salary increases. This rate is influenced by our long-term compensation policies.
- The assumed health care trend rate represents the rate at which health care costs are assumed to increase and is based on historical and expected experience. Changes in our projections of future health care costs due to general economic conditions and those specific to health care (e.g., technology driven cost changes) will impact this trend rate.
- We use the mortality assumption to estimate the life expectancy of plan participants.

Postretirement Benefit Plan Actuarial Assumptions Sensitivity

The effects of a one percentage-point change in certain actuarial assumptions on 2024 pension and OPEB costs and obligations are as follows:

(Millions of dollars)	2024 Benefit Cost Increase (Decrease)		Year-end Benefit Obligation Increase (Decrease)	
	One percentage-point increase	One percentage-point decrease	One percentage-point increase	One percentage-point decrease
U.S. Pension Benefits: ¹				
Assumed discount rate	\$ 56	\$ (70)	\$ (1,011)	\$ 1,187
Expected long-term rate of return on plan assets	(123)	123	—	—
Non-U.S. Pension Benefits:				
Assumed discount rate	8	(11)	(315)	387
Expected rate of compensation increase	4	(4)	28	(24)
Expected long-term rate of return on plan assets	(32)	32	—	—
Other Postretirement Benefits:				
Assumed discount rate	5	(6)	(184)	213
Expected rate of compensation increase	—	—	1	(1)
Expected long-term rate of return on plan assets	(1)	1	—	—

¹ Effective December 31, 2019, all U.S. pension benefits were frozen, and accordingly the expected rate of compensation increase assumption is no longer applicable.

Actuarial Assumptions

	U.S. Pension Benefits			Non-U.S. Pension Benefits			Other Postretirement Benefits		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
Weighted-average assumptions used to determine benefit obligation, end of year:									
Discount rate	5.6 %	5.0 %	5.4 %	4.1 %	3.9 %	4.3 %	5.6 %	5.1 %	5.4 %
Rate of compensation increase ¹	— %	— %	— %	2.2 %	2.3 %	2.3 %	4.0 %	4.0 %	4.0 %
Weighted-average assumptions used to determine net periodic benefit cost:									
Discount rate used to measure service cost ¹	— %	— %	— %	3.6 %	3.8 %	1.7 %	5.1 %	5.4 %	2.8 %
Discount rate used to measure interest cost	5.0 %	5.2 %	2.3 %	3.9 %	4.2 %	1.7 %	5.0 %	5.3 %	2.2 %
Expected rate of return on plan assets	5.7 %	5.8 %	4.0 %	5.1 %	5.2 %	3.1 %	7.4 %	7.4 %	6.9 %
Rate of compensation increase ¹	— %	— %	— %	2.3 %	2.3 %	2.0 %	4.0 %	4.0 %	4.0 %
Health care cost trend rates at year-end:									
Health care trend rate assumed for next year							6.0 %	6.2 %	6.5 %
Rate that the cost trend rate gradually declines to							4.7 %	4.7 %	4.7 %
Year that the cost trend rate reaches ultimate rate							2030	2030	2030

¹ Effective December 31, 2019, all U.S. pension benefits were frozen, and accordingly this assumption is no longer applicable.

See Note 12 — “Postemployment benefit plans” of Part II, Item 8 “Financial Statement and Supplemental Data” for further information regarding the accounting for postretirement benefits.

Post-sale discount reserve — We provide discounts to dealers through merchandising programs. We have numerous programs that are designed to promote the sale of our products. The most common dealer programs provide a discount when the dealer sells a product to a targeted end user. The amount of accrued post-sale discounts was \$2.2 billion and \$2.1 billion at December 31, 2024 and 2023, respectively. The reserve represents discounts that we expect to pay on previously sold units and is reviewed at least quarterly. We adjust the reserve if discounts paid differ from those estimated. Historically, those adjustments have not been material.

Allowance for credit losses — The allowance for credit losses is management's estimate of expected losses over the life of our finance receivable portfolio calculated using loss forecast models that take into consideration historical credit loss experience, current economic conditions and forecasts and scenarios that capture country and industry-specific economic factors. In addition, we consider qualitative factors not able to be fully captured in our loss forecast models, including borrower-specific and company-specific factors. These qualitative factors are subjective and require a degree of management judgment.

We measure the allowance for credit losses on a collective (pool) basis when similar risk characteristics exist and on an individual basis when we determine that similar risk characteristics do not exist. We identify finance receivables for individual evaluation based on past due status and information available about the customer, such as financial statements, news reports and published credit ratings, as well as general information regarding industry trends and the economic environment in which our customers operate. The allowance for credit losses attributable to finance receivables that are individually evaluated is based on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables or the observable market price of the receivable. In determining collateral value, we estimate the current fair market value of the collateral less selling costs. We also consider credit enhancements such as additional collateral and contractual third-party guarantees.

While management believes it has exercised prudent judgment and applied reasonable assumptions, there can be no assurance that in the future, changes in economic conditions or other factors would not cause changes in the financial health of our customers. If the financial health of our customers deteriorates, the timing and level of payments received could be impacted and therefore, could result in a change to our estimated losses.

Income taxes — We are subject to the income tax laws of the many jurisdictions in which we operate. These tax laws are complex, and the manner in which they apply to our facts is sometimes open to interpretation. In establishing the provision for income taxes, we must make judgments about the application of these inherently complex tax laws. Our income tax positions and analysis are based on currently enacted tax law. Future changes in tax law or related interpretations could significantly impact the provision for income taxes, the amount of taxes payable, and the deferred tax asset and liability balances. Changes in tax law are reflected in the period of enactment with related interpretations considered in the period received.

Despite our belief that our tax return positions are consistent with applicable tax laws, we believe that taxing authorities could challenge certain positions. Settlement of any challenge can result in no change, a complete disallowance, or some partial adjustment reached through negotiations or litigation. We record tax benefits for uncertain tax positions based upon management's evaluation of the information available at the reporting date. To be recognized in the financial statements, a tax benefit must be at least more likely than not of being sustained based on technical merits. The benefit for positions meeting the recognition threshold is measured as the largest benefit more likely than not of being realized upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. Significant judgment is required in making these determinations and adjustments to unrecognized tax benefits may be necessary to reflect actual taxes payable upon settlement. Adjustments related to positions impacting the effective tax rate affect the provision for income taxes. Adjustments related to positions impacting the timing of deductions impact deferred tax assets and liabilities.

Deferred tax assets generally represent tax benefits for tax deductions or credits available in future tax returns. Certain estimates and assumptions are required to determine whether it is more likely than not that all or some portion of the benefit of a deferred tax asset will not be realized. In making this assessment, management analyzes the trend of U.S. GAAP earnings and estimates the impact of future taxable income, reversing temporary differences and available prudent and feasible tax planning strategies. We give less weight in this analysis to mark-to-market adjustments to remeasure our pension and OPEB plans as we do not consider these adjustments indicative of ongoing earnings trends. Should a change in facts or circumstances lead to a change in judgment about the ultimate realizability of a deferred tax asset, we record or adjust the related valuation allowance in the period that the change in facts and circumstances occurs, along with a corresponding increase or decrease in the provision for income taxes.

Additional information related to income taxes is included in Note 6 — "Income taxes" of Part II, Item 8 "Financial statements and Supplementary Data."

OTHER MATTERS

Information related to legal proceedings appears in Note 22 — "Environmental and legal matters" of Part II, Item 8 "Financial Statements and Supplementary Data."

RETIREMENT BENEFITS

We recognize mark-to-market gains and losses immediately through earnings upon the remeasurement of our pension and OPEB plans. Mark-to-market gains and losses represent the effects of actual results differing from our assumptions and the effects of changing assumptions. Changes in discount rates and differences between the actual return on plan assets and the expected return on plan assets generally have the largest impact on mark-to-market gains and losses.

The table below summarizes the amounts of net periodic benefit cost recognized for 2024, 2023 and 2022, respectively, and includes expected cost for 2025.

(Millions of dollars)	2025 Expected	2024	2023	2022
U.S. Pension Benefits	\$ (108)	\$ (74)	\$ (33)	\$ (268)
Non-U.S. Pension Benefits	(2)	(4)	2	(10)
Other Postretirement Benefits	173	177	188	161
Mark-to-market loss (gain)	— ¹	(154)	(97)	(606)
Total net periodic benefit cost (benefit)	\$ 63	\$ (55)	\$ 60	\$ (723)

¹ Expected net periodic benefit cost (benefit) does not include an estimate for mark-to-market gains or losses.

- **Expected decrease in expense in 2025 compared to 2024** — Excluding the impact of mark-to-market gains and losses, our net periodic benefit cost is expected to decrease \$36 million in 2025. This expected decrease is primarily due to lower interest cost in 2025 as a result of higher discount rates at the end of 2024 creating a lower obligation base (U.S. pension plans year-end 2024 obligation was \$12.2 billion compared to a year-end 2023 obligation of \$13.1 billion) and a higher expected return on assets in 2025 (U.S. pension plans expected rate of return on plans assets is 6.3 percent for 2025 compared to 5.7 percent for 2024; however, this increase is muted due to a lower asset base at year-end 2024 of \$11.9 billion compared to \$12.7 billion at year-end 2023).
- **Decrease in expense in 2024 compared to 2023** — Primarily due to higher mark-to-market gains in 2024 compared to 2023, lower interest cost in 2024 as a result of lower discount rates at year-end 2023 and a higher expected return on plan assets due to a higher asset base at year-end 2023 compared to year-end 2022.
- **Increase in expense in 2023 compared to 2022** — Primarily due to lower mark-to-market gains in 2023 compared to 2022 and higher interest cost in 2023 as a result of higher discount rates at year-end 2022.

The primary factors that resulted in mark-to-market losses (gains) for 2024, 2023 and 2022 are described below. We include the net mark-to-market losses (gains) in Other income (expense) in the Results of Operations.

- **2024 net mark-to-market gain of \$154 million** — Primarily due to higher discount rates at the end of 2024 compared to the end of 2023. This was partially offset by a lower actual return on plan assets compared to the expected return on plan assets (U.S. pension plans had an actual rate of return of 0.7 percent compared to an expected rate of return of 5.7 percent).
- **2023 net mark-to-market gain of \$97 million** — Primarily due to higher actual return on plan assets compared to the expected return on plan assets (U.S. pension plans had an actual rate of return of 10.4 percent compared to an expected rate of return of 5.8 percent) and favorable claims experience related to our other postretirement benefit plans. This was partially offset by lower discount rates at the end of 2023 compared to the end of 2022.
- **2022 net mark-to-market gain of \$606 million** — Primarily due to higher discount rates at the end of 2022 compared to the end of 2021. This was partially offset by a lower actual return on plan assets compared to the expected return on plan assets (U.S. pension plans had an actual loss rate of (22.6) percent compared to an expected rate of return of 4.0 percent).

SENSITIVITY

Foreign Exchange Rate Sensitivity

ME&T operations use foreign currency forward and option contracts to manage unmatched foreign currency cash inflow and outflow. Our objective is to minimize the risk of exchange rate movements that would reduce the U.S. dollar value of our foreign currency cash flow. Our policy allows for managing anticipated foreign currency cash flow for up to approximately five years. Based on the anticipated and firmly committed cash inflow and outflow for our ME&T operations for the next 12 months and the foreign currency derivative instruments in place at year-end, a hypothetical 10 percent weakening of the U.S. dollar relative to all other currencies would adversely affect our expected 2025 cash flow for our ME&T operations by approximately \$77 million. Last year, similar assumptions and calculations yielded a potential \$200 million adverse impact on 2024 cash flow. We determine our net exposures by calculating the difference in cash inflow and outflow by currency and adding or subtracting outstanding foreign currency derivative instruments. We multiply these net amounts by 10 percent to determine the sensitivity.

In managing foreign currency risk for our Financial Products operations, our objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions and future transactions denominated in foreign currencies. Since our policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between our assets and liabilities and exchange rate risk associated with future transactions denominated in foreign currencies, a 10 percent change in the value of the U.S. dollar relative to all other currencies would not have a material effect on our consolidated financial position, results of operations or cash flow. Neither our policy nor the effect of a 10 percent change in the value of the U.S. dollar has changed from that reported at the end of last year.

The effect of the hypothetical change in exchange rates ignores the effect this movement may have on other variables, including competitive risk. If it were possible to quantify this competitive impact, the results would probably be different from the sensitivity effects shown above. In addition, it is unlikely that all currencies would uniformly strengthen or weaken relative to the U.S. dollar. In reality, some currencies may weaken while others may strengthen. Our primary exposure (excluding competitive risk) is to exchange rate movements in the Australian dollar, Chinese yuan, Euro, Indian rupee and Mexican peso.

Interest Rate Sensitivity

For our ME&T operations, we have the option to use interest rate contracts to lower the cost of borrowed funds by attaching fixed-to-floating interest rate contracts to fixed-rate debt, and by entering into forward rate agreements on future debt issuances. A hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would have a minimal impact to the 2025 pre-tax earnings of ME&T. Last year, similar assumptions and calculations yielded a minimal impact to 2024 pre-tax earnings.

For our Financial Products operations, we use interest rate derivative instruments primarily to meet our match-funding objectives and strategies. We have a match-funding policy that addresses the interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of our debt portfolio with the interest rate profile of our finance receivable portfolio within a predetermined range on an ongoing basis. In connection with that policy, we use interest rate derivative instruments to modify the debt structure to match assets within the finance receivable portfolio. Match funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move.

In order to properly manage sensitivity to changes in interest rates, Financial Products measures the potential impact of different interest rate assumptions on pre-tax earnings. All on-balance sheet positions, including derivative financial instruments, are included in the analysis. The primary assumptions included in the analysis are that there are no new fixed rate assets or liabilities, the proportion of fixed rate debt to fixed rate assets remains unchanged and the level of floating rate assets and debt remain constant. An analysis of the December 31, 2024 balance sheet, using these assumptions, estimates the impact of a 100 basis point immediate and sustained adverse change in interest rates to have a minimal impact on 2025 pre-tax earnings. Last year, similar assumptions and calculations yielded a minimal impact to 2024 pre-tax earnings.

This analysis does not necessarily represent our current outlook of future market interest rate movement, nor does it consider any actions management could undertake in response to changes in interest rates. Accordingly, no assurance can be given that actual results would be consistent with the results of our estimate.

NON-GAAP FINANCIAL MEASURES

We provide the following definitions for the non-GAAP financial measures used in this report. These non-GAAP financial measures have no standardized meaning prescribed by U.S. GAAP and therefore are unlikely to be comparable to the calculation of similar measures for other companies. Management does not intend these items to be considered in isolation or as a substitute for the related GAAP measures.

We believe it is important to separately quantify the profit impact of six significant items in order for our results to be meaningful to our readers. These items consist of (i) restructuring income/costs related to the divestitures of certain non-U.S. entities in 2024, (ii) other restructuring income/costs, (iii) pension and OPEB mark-to-market gains/losses resulting from plan remeasurements, (iv) a discrete tax benefit for a tax law change related to currency translation in 2024, (v) restructuring costs related to the divestiture of the company's Longwall business in 2023 and (vi) certain deferred tax valuation allowance adjustments in 2023. We do not consider these items indicative of earnings from ongoing business activities and believe the non-GAAP measures will provide investors with useful perspective on underlying business results and trends and aids with assessing our period-over-period results.

Reconciliations of adjusted results to the most directly comparable GAAP measures are as follows:

(Dollars in millions except per share data)	Operating Profit	Operating Profit Margin	Profit Before Taxes	Provision (Benefit) for Income Taxes	Profit	Profit per Share
Twelve Months Ended December 31, 2024 - U.S. GAAP	\$ 13,072	20.2 %	\$ 13,373	\$ 2,629	\$ 10,792	\$ 22.05
Restructuring (income) costs - divestitures of certain non-U.S. entities	164	0.2 %	164	54	110	0.22
Other restructuring (income) costs	195	0.3 %	195	46	149	0.32
Pension/OPEB mark-to-market (gains) losses	—	— %	(154)	(43)	(111)	(0.23)
Tax law change related to currency translation	—	— %	—	224	(224)	(0.46)
Twelve Months Ended December 31, 2024 - Adjusted	<u>\$ 13,431</u>	<u>20.7 %</u>	<u>\$ 13,578</u>	<u>\$ 2,910</u>	<u>\$ 10,716</u>	<u>\$ 21.90</u>
Twelve Months Ended December 31, 2023 - U.S. GAAP	\$ 12,966	19.3 %	\$ 13,050	\$ 2,781	\$ 10,335	\$ 20.12
Restructuring costs - Longwall divestiture	586	0.9 %	586	—	586	1.14
Other restructuring (income) costs	194	0.3 %	194	48	146	0.30
Pension/OPEB mark-to-market (gains) losses	—	— %	(97)	(26)	(71)	(0.14)
Deferred tax valuation allowance adjustments	—	— %	—	106	(106)	(0.21)
Twelve Months Ended December 31, 2023 - Adjusted	<u>\$ 13,746</u>	<u>20.5 %</u>	<u>\$ 13,733</u>	<u>\$ 2,909</u>	<u>\$ 10,890</u>	<u>\$ 21.21</u>

We believe it is important to separately disclose our annual effective tax rate, excluding discrete items for our results to be meaningful to our readers. The annual effective tax rate is discussed using non-GAAP financial measures that exclude the effects of amounts associated with discrete items recorded fully in the quarter they occur. These items consist of (i) restructuring income/costs related to the divestitures of certain non-U.S. entities in 2024, (ii) pension and OPEB mark-to-market gains/losses resulting from plan remeasurements, (iii) a discrete tax benefit for a tax law change related to currency translation in 2024, (iv) the impact of changes in estimates related to prior years in 2024, (v) a settlement of stock-based compensation awards with associated tax deductions in excess of cumulative U.S. GAAP compensation expense, (vi) restructuring costs related to divestiture of the company's Longwall business in 2023 and (vii) deferred tax valuation allowance adjustments in 2023. We believe the non-GAAP measures will provide investors with useful perspective on underlying business results and trends and aids with assessing the company's period-over-period results.

A reconciliation of our effective tax rate to annual effective tax rate, excluding discrete items is below:

(Millions of dollars)	Profit Before Taxes	Provision (Benefit) for Income Taxes	Effective Tax Rate
Twelve Months Ended December 31, 2024 - U.S. GAAP	\$ 13,373	\$ 2,629	19.7 %
Restructuring (income) costs - divestitures of certain non-U.S. entities	164	54	
Pension/OPEB mark-to-market (gains) losses	(154)	(43)	
Tax law change related to currency translation	—	224	
Changes in estimates related to prior years	—	47	
Excess stock-based compensation	—	57	
Annual effective tax rate, excluding discrete items	\$ 13,383	\$ 2,968	22.2 %
Changes in estimates related to prior years	—	(47)	
Excess stock-based compensation	—	(57)	
Other restructuring (income) costs	195	46	
Twelve Months Ended December 31, 2024 - Adjusted	<u>\$ 13,578</u>	<u>\$ 2,910</u>	
Twelve Months Ended December 31, 2023 - U.S. GAAP	\$ 13,050	\$ 2,781	21.3 %
Restructuring costs - Longwall divestiture	586	—	
Pension/OPEB mark-to-market (gains) losses	(97)	(26)	
Deferred tax valuation allowance adjustments	—	88	
Excess stock-based compensation	—	57	
Annual effective tax rate, excluding discrete items	\$ 13,539	\$ 2,900	21.4 %
Deferred tax valuation allowance adjustments	—	18	
Excess stock-based compensation	—	(57)	
Other restructuring (income) costs	194	48	
Twelve Months Ended December 31, 2023 - Adjusted	<u>\$ 13,733</u>	<u>\$ 2,909</u>	

In addition, we provide a calculation of ME&T free cash flow as we believe it is an important measure for investors to determine the cash generation available for financing activities including debt repayments, dividends and share repurchases.

Reconciliations of ME&T free cash flow to the most directly comparable GAAP measure, net cash provided by operating activities are as follows:

Millions of dollars	Twelve Months Ended December 31,	
	2024	2023
ME&T net cash provided by operating activities ¹	\$ 11,437	\$ 11,688
ME&T capital expenditures	(1,988)	(1,663)
ME&T free cash flow	<u>\$ 9,449</u>	<u>\$ 10,025</u>

¹ See reconciliation of ME&T net cash provided by operating activities to consolidated net cash provided by operating activities on page 52.

Supplemental Consolidating Data

We are providing supplemental consolidating data for the purpose of additional analysis. We have grouped the data as follows:

Consolidated – Caterpillar Inc. and its subsidiaries.

Machinery, Energy & Transportation – We define ME&T as it is presented in the supplemental data as Caterpillar Inc. and its subsidiaries, excluding Financial Products. ME&T's information relates to the design, manufacturing and marketing of our products.

Financial Products – We define Financial Products as it is presented in the supplemental data as our finance and insurance subsidiaries, primarily Caterpillar Financial Services Corporation (Cat Financial) and Cat Insurance Holdings Inc. (Insurance Services). Financial Products' information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment.

Consolidating Adjustments – Eliminations of transactions between ME&T and Financial Products.

The nature of the ME&T and Financial Products businesses is different, especially with regard to the financial position and cash flow items. Caterpillar management utilizes this presentation internally to highlight these differences. We believe this presentation will assist readers in understanding our business.

Pages 50 to 52 reconcile ME&T and Financial Products to Caterpillar Inc. consolidated financial information.

**Supplemental Data for Results of Operations
For The Years Ended December 31,**

(Millions of dollars)	Supplemental consolidating data											
	Consolidated			Machinery, Energy & Transportation			Financial Products			Consolidating Adjustments		
	2024	2023	2022	2024	2023	2022	2024	2023	2022	2024	2023	2022
Sales and revenues:												
Sales of Machinery, Energy & Transportation	\$ 61,363	\$ 63,869	\$ 56,574	\$ 61,363	\$ 63,869	\$ 56,574	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Revenues of Financial Products	3,446	3,191	2,853	—	—	—	4,212	3,927	3,376	(766) ¹	(736) ¹	(523) ¹
Total sales and revenues	64,809	67,060	59,427	61,363	63,869	56,574	4,212	3,927	3,376	(766)	(736)	(523)
Operating costs:												
Cost of goods sold	40,199	42,767	41,350	40,206	42,776	41,356	—	—	—	(7) ²	(9) ²	(6) ²
Selling, general and administrative expenses	6,667	6,371	5,651	5,881	5,696	4,999	786	704	672	—	(29) ²	(20) ²
Research and development expenses	2,107	2,108	1,814	2,107	2,108	1,814	—	—	—	—	—	—
Interest expense of Financial Products	1,286	1,030	565	—	—	—	1,286	1,032	565	—	(2) ²	—
Goodwill impairment charge	—	—	925	—	—	925	—	—	—	—	—	—
Other operating (income) expenses	1,478	1,818	1,218	71	630	47	1,535	1,268	1,249	(128) ²	(80) ²	(78) ²
Total operating costs	51,737	54,094	51,523	48,265	51,210	49,141	3,607	3,004	2,486	(135)	(120)	(104)
Operating profit	13,072	12,966	7,904	13,098	12,659	7,433	605	923	890	(631)	(616)	(419)
Interest expense excluding Financial Products	512	511	443	518	511	444	—	—	—	(6) ³	—	(1) ³
Other income (expense)	813	595	1,291	728	340	1,374	85	(16)	(26)	—	271 ⁴	(57) ⁴
Consolidated profit before taxes	13,373	13,050	8,752	13,308	12,488	8,363	690	907	864	(625)	(345)	(475)
Provision (benefit) for income taxes	2,629	2,781	2,067	2,663	2,560	1,858	(34)	221	209	—	—	—
Profit of consolidated companies	10,744	10,269	6,685	10,645	9,928	6,505	724	686	655	(625)	(345)	(475)
Equity in profit (loss) of unconsolidated affiliated companies	44	63	19	44	67	26	—	—	—	—	(4) ⁵	(7) ⁵
Profit of consolidated and affiliated companies	10,788	10,332	6,704	10,689	9,995	6,531	724	686	655	(625)	(349)	(482)
Less: Profit (loss) attributable to noncontrolling interests	(4)	(3)	(1)	(5)	(4)	(1)	1	5	7	—	(4) ⁶	(7) ⁶
Profit ⁷	<u>\$ 10,792</u>	<u>\$ 10,335</u>	<u>\$ 6,705</u>	<u>\$ 10,694</u>	<u>\$ 9,999</u>	<u>\$ 6,532</u>	<u>\$ 723</u>	<u>\$ 681</u>	<u>\$ 648</u>	<u>\$ (625)</u>	<u>\$ (345)</u>	<u>\$ (475)</u>

¹ Elimination of Financial Products' revenues earned from ME&T.

² Elimination of net expenses recorded between ME&T and Financial Products.

³ Elimination of interest expense recorded between Financial Products and ME&T.

⁴ Elimination of discount recorded by ME&T on receivables sold to Financial Products and of interest earned between ME&T and Financial Products as well as dividends paid by Financial Products to ME&T.

⁵ Elimination of equity profit (loss) earned from Financial Products' subsidiaries partially owned by ME&T subsidiaries.

⁶ Elimination of noncontrolling interest profit (loss) recorded by Financial Products for subsidiaries partially owned by ME&T subsidiaries.

⁷ Profit attributable to common shareholders.

Supplemental Data for Financial Position
At December 31,

(Millions of dollars)	Supplemental consolidating data							
	Consolidated		Machinery, Energy & Transportation		Financial Products		Consolidating Adjustments	
	2024	2023	2024	2023	2024	2023	2024	2023
Assets								
Current assets:								
Cash and cash equivalents	\$ 6,889	\$ 6,978	\$ 6,165	\$ 6,106	\$ 724	\$ 872	\$ —	\$ —
Receivables - trade and other	9,282	9,310	3,463	3,971	688	570	5,131 ^{1,2}	4,769 ^{1,2}
Receivables - finance	9,565	9,510	—	—	14,957	14,499	(5,392) ²	(4,989) ²
Prepaid expenses and other current assets	3,119	4,586	2,872	4,327	401	341	(154) ³	(82) ³
Inventories	16,827	16,565	16,827	16,565	—	—	—	—
Total current assets	45,682	46,949	29,327	30,969	16,770	16,282	(415)	(302)
Property, plant and equipment - net	13,361	12,680	9,531	8,694	3,830	3,986	—	—
Long-term receivables - trade and other	1,225	1,238	500	565	86	85	639 ^{1,2}	588 ^{1,2}
Long-term receivables - finance	13,242	12,664	—	—	14,048	13,299	(806) ²	(635) ²
Noncurrent deferred and refundable income taxes	3,312	2,816	3,594	3,360	118	148	(400) ⁴	(692) ⁴
Intangible assets	399	564	399	564	—	—	—	—
Goodwill	5,241	5,308	5,241	5,308	—	—	—	—
Other assets	5,302	5,257	4,050	4,218	2,277	2,082	(1,025) ⁵	(1,043) ⁵
Total assets	\$ 87,764	\$ 87,476	\$ 52,642	\$ 53,678	\$ 37,129	\$ 35,882	\$ (2,007)	\$ (2,084)
Liabilities								
Current liabilities:								
Short-term borrowings	\$ 4,393	\$ 4,643	\$ —	\$ —	\$ 4,393	\$ 4,643	\$ —	\$ —
Accounts payable	7,675	7,906	7,619	7,827	331	314	(275) ^{6,7}	(235) ^{6,7}
Accrued expenses	5,243	4,958	4,589	4,361	654	597	—	—
Accrued wages, salaries and employee benefits	2,391	2,757	2,335	2,696	56	61	—	—
Customer advances	2,322	1,929	2,305	1,912	3	2	14 ⁷	15 ⁷
Dividends payable	674	649	674	649	—	—	—	—
Other current liabilities	2,909	3,123	2,388	2,583	696	647	(175) ^{4,8}	(107) ^{4,8}
Long-term debt due within one year	6,665	8,763	46	1,044	6,619	7,719	—	—
Total current liabilities	32,272	34,728	19,956	21,072	12,752	13,983	(436)	(327)
Long-term debt due after one year	27,351	24,472	8,731	8,626	18,787	15,893	(167) ⁹	(47) ⁹
Liability for postemployment benefits	3,757	4,098	3,757	4,098	—	—	—	—
Other liabilities	4,890	4,675	3,977	3,806	1,344	1,607	(431) ⁴	(738) ⁴
Total liabilities	68,270	67,973	36,421	37,602	32,883	31,483	(1,034)	(1,112)
Commitments and contingencies								
Shareholders' equity								
Common stock	6,941	6,403	6,941	6,403	905	905	(905) ¹⁰	(905) ¹⁰
Treasury stock	(44,331)	(36,339)	(44,331)	(36,339)	—	—	—	—
Profit employed in the business	59,352	51,250	54,787	46,783	4,555	4,457	10 ¹⁰	10 ¹⁰
Accumulated other comprehensive income (loss)	(2,471)	(1,820)	(1,182)	(783)	(1,289)	(1,037)	—	—
Noncontrolling interests	3	9	6	12	75	74	(78) ¹⁰	(77) ¹⁰
Total shareholders' equity	19,494	19,503	16,221	16,076	4,246	4,399	(973)	(972)
Total liabilities and shareholders' equity	\$ 87,764	\$ 87,476	\$ 52,642	\$ 53,678	\$ 37,129	\$ 35,882	\$ (2,007)	\$ (2,084)

¹ Elimination of receivables between ME&T and Financial Products.

² Reclassification of ME&T's trade receivables purchased by Financial Products and Financial Products' wholesale inventory receivables.

³ Elimination of ME&T's insurance premiums that are prepaid to Financial Products.

⁴ Reclassification reflecting required netting of deferred tax assets/liabilities by taxing jurisdiction.

⁵ Elimination of other intercompany assets and liabilities between ME&T and Financial Products.

⁶ Elimination of payables between ME&T and Financial Products.

⁷ Reclassification of Financial Products' payables to customer advances.

⁸ Elimination of prepaid insurance in Financial Products' other liabilities.

⁹ Elimination of debt between ME&T and Financial Products.

¹⁰ Eliminations associated with ME&T's investments in Financial Products' subsidiaries.

Supplemental Data for Statement of Cash Flow
For the Years Ended December 31,

(Millions of dollars)	Supplemental consolidating data							
	Consolidated		Machinery, Energy & Transportation		Financial Products		Consolidating Adjustments	
	2024	2023	2024	2023	2024	2023	2024	2023
Cash flow from operating activities:								
Profit of consolidated and affiliated companies	\$ 10,788	\$ 10,332	\$ 10,689	\$ 9,995	\$ 724	\$ 686	\$ (625) ^{1,5}	\$ (349) ^{1,5}
Adjustments to reconcile profit to net cash provided by operating activities:								
Depreciation and amortization	2,153	2,144	1,368	1,361	785	783	—	—
Actuarial (gain) loss on pension and postretirement benefits	(154)	(97)	(154)	(97)	—	—	—	—
Provision (benefit) for deferred income taxes	(621)	(592)	(327)	(576)	(294)	(16)	—	—
(Gain) loss on divestiture	164	572	(46)	572	210	—	—	—
Other	564	375	355	444	(388)	(577)	597 ²	508 ²
Changes in assets and liabilities, net of acquisitions and divestitures:								
Receivables - trade and other	(160)	(437)	413	(367)	207	61	(780) ^{2,3}	(131) ^{2,3}
Inventories	(414)	(364)	(400)	(360)	—	—	(14) ²	(4) ²
Accounts payable	(282)	(754)	(200)	(836)	(41)	41	(41) ²	41 ²
Accrued expenses	191	796	78	690	113	106	—	—
Accrued wages, salaries and employee benefits	(363)	486	(358)	474	(5)	12	—	—
Customer advances	370	80	369	78	1	2	—	—
Other assets—net	(97)	(95)	(188)	94	48	(110)	43 ²	(79) ²
Other liabilities—net	(104)	439	(162)	216	85	118	(27) ²	105 ²
Net cash provided by (used for) operating activities	12,035	12,885	11,437	11,688	1,445	1,106	(847)	91
Cash flow from investing activities:								
Capital expenditures—excluding equipment leased to others	(1,988)	(1,597)	(1,952)	(1,624)	(41)	(22)	5 ²	49 ²
Expenditures for equipment leased to others	(1,227)	(1,495)	(36)	(39)	(1,211)	(1,466)	20 ²	10 ²
Proceeds from disposals of leased assets and property, plant and equipment	722	781	35	55	698	781	(11) ²	(55) ²
Additions to finance receivables	(15,409)	(15,161)	—	—	(16,845)	(17,321)	1,436 ³	2,160 ³
Collections of finance receivables	13,608	14,034	—	—	14,707	15,634	(1,099) ³	(1,600) ³
Net intercompany purchased receivables	—	—	—	—	129	1,080	(129) ³	(1,080) ³
Proceeds from sale of finance receivables	83	63	—	—	83	63	—	—
Net intercompany borrowings	—	—	—	—	21	10	(21) ⁴	(10) ⁴
Investments and acquisitions (net of cash acquired)	(34)	(75)	(34)	(75)	—	—	—	—
Proceeds from sale of businesses and investments (net of cash sold)	(61)	(4)	92	(4)	(153)	—	—	—
Proceeds from maturities and sale of securities	3,155	1,891	2,795	1,642	360	249	—	—
Investments in securities	(1,495)	(4,405)	(909)	(3,982)	(586)	(423)	—	—
Other—net	193	97	142	106	51	(9)	—	—
Net cash provided by (used for) investing activities	(2,453)	(5,871)	133	(3,921)	(2,787)	(1,424)	201	(526)
Cash flow from financing activities:								
Dividends paid	(2,646)	(2,563)	(2,646)	(2,563)	(625)	(425)	625 ⁵	425 ⁵
Common stock issued, including treasury shares reissued	20	12	20	12	—	—	—	—
Payments to purchase common stock	(7,697)	(4,975)	(7,697)	(4,975)	—	—	—	—
Excise tax paid on purchases of common stock	(40)	—	(40)	—	—	—	—	—
Net intercompany borrowings	—	—	(21)	(10)	—	—	21 ⁴	10 ⁴
Proceeds from debt issued (original maturities greater than three months)	10,283	8,257	—	—	10,283	8,257	—	—
Payments on debt (original maturities greater than three months)	(9,316)	(6,318)	(1,032)	(106)	(8,284)	(6,212)	—	—
Short-term borrowings - net (original maturities three months or less)	(168)	(1,345)	—	(3)	(168)	(1,342)	—	—
Other—net	(1)	—	(1)	—	—	—	—	—
Net cash provided by (used for) financing activities	(9,565)	(6,932)	(11,417)	(7,645)	1,206	278	646	435
Effect of exchange rate changes on cash	(106)	(110)	(94)	(60)	(12)	(50)	—	—
Increase (decrease) in cash, cash equivalents and restricted cash	(89)	(28)	59	62	(148)	(90)	—	—
Cash, cash equivalents and restricted cash at beginning of period	6,985	7,013	6,111	6,049	874	964	—	—
Cash, cash equivalents and restricted cash at end of period	\$ 6,896	\$ 6,985	\$ 6,170	\$ 6,111	\$ 726	\$ 874	\$ —	\$ —

¹ Elimination of equity profit earned from Financial Products' subsidiaries partially owned by ME&T subsidiaries.

² Elimination of non-cash adjustments and changes in assets and liabilities related to consolidated reporting.

³ Reclassification of Financial Products' cash flow activity from investing to operating for receivables that arose from the sale of inventory.

⁴ Elimination of net proceeds and payments to/from ME&T and Financial Products.

⁵ Elimination of dividend activity between Financial Products and ME&T.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Information required by Item 7A appears in Note 1 — “Operations and summary of significant accounting policies,” Note 2 — “Sales and revenue recognition,” Note 4 — “Derivative financial instruments and risk management,” Note 7 — “Cat Financial financing activities,” Note 11 — “Investments in debt and equity securities,” and Note 18 — “Fair value disclosures” of Part II, Item 8 “Financial Statements and Supplementary Data.” Other information required by Item 7A is included in Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Item 8. Financial Statements and Supplementary Data.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Caterpillar Inc. (company) is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rule 13a-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2024. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework* (2013). Based on our assessment we concluded that, as of December 31, 2024, the company's internal control over financial reporting was effective based on those criteria.

The effectiveness of the company's internal control over financial reporting as of December 31, 2024 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm. Their report appears on pages 55- 56.

/s/ D. James Umpleby III

D. James Umpleby III
Chief Executive Officer

/s/ Andrew R.J. Bonfield

Andrew R.J. Bonfield
Chief Financial Officer

February 14, 2025

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Caterpillar Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statement of financial position of Caterpillar Inc. and its subsidiaries (the “Company”) as of December 31, 2024 and 2023, and the related consolidated statements of results of operations, of comprehensive income (loss), of changes in shareholders' equity and of cash flow for each of the three years in the period ended December 31, 2024, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

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

Product Warranty Liability

As described in Notes 2 and 21 to the consolidated financial statements, the Company's product warranty liability as of December 31, 2024 was \$1,700 million. At the time the Company recognizes a sale, management records estimated future warranty costs. Management determines the product warranty liability by applying historical claim rate experience to the current field population and dealer inventory. Generally, management bases historical claim rates on actual warranty experience for each product by machine model/engine size by customer or dealer location (inside or outside North America). Management develops specific rates for each product shipment month and updates them monthly based on actual warranty claim experience.

The principal considerations for our determination that performing procedures relating to the product warranty liability is a critical audit matter are (i) the significant judgment by management when developing the estimate of the product warranty liability, (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating management's significant assumption related to historical claim rates, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's estimate of the product warranty liability. These procedures also included, among others (i) testing the completeness and accuracy of underlying data provided by management and (ii) the involvement of professionals with specialized skill and knowledge to assist in evaluating the reasonableness of management's estimate by performing one or a combination of procedures, including (a) developing an independent actuarial estimate of the product warranty liability, and comparing the independent estimate to management's actuarial determined liability; and (b) evaluating the appropriateness of management's actuarial methodologies and the reasonableness of management's significant assumption related to historical claim rates.

/s/ PricewaterhouseCoopers LLP
Dallas, Texas
February 14, 2025

We have served as the Company's auditor since 1925.

STATEMENT 1		Caterpillar Inc.		
Consolidated Results of Operations for the Years Ended December 31, (Dollars in millions except per share data)				
	2024	2023	2022	
Sales and revenues:				
Sales of Machinery, Energy & Transportation	\$ 61,363	\$ 63,869	\$ 56,574	
Revenues of Financial Products	3,446	3,191	2,853	
Total sales and revenues	64,809	67,060	59,427	
Operating costs:				
Cost of goods sold	40,199	42,767	41,350	
Selling, general and administrative expenses	6,667	6,371	5,651	
Research and development expenses	2,107	2,108	1,814	
Interest expense of Financial Products	1,286	1,030	565	
Goodwill impairment charge	—	—	925	
Other operating (income) expenses	1,478	1,818	1,218	
Total operating costs	51,737	54,094	51,523	
Operating profit	13,072	12,966	7,904	
Interest expense excluding Financial Products	512	511	443	
Other income (expense)	813	595	1,291	
Consolidated profit before taxes	13,373	13,050	8,752	
Provision (benefit) for income taxes	2,629	2,781	2,067	
Profit of consolidated companies	10,744	10,269	6,685	
Equity in profit (loss) of unconsolidated affiliated companies	44	63	19	
Profit of consolidated and affiliated companies	10,788	10,332	6,704	
Less: Profit (loss) attributable to noncontrolling interests	(4)	(3)	(1)	
Profit ¹	\$ 10,792	\$ 10,335	\$ 6,705	
Profit per common share	\$ 22.17	\$ 20.24	\$ 12.72	
Profit per common share — diluted ²	\$ 22.05	\$ 20.12	\$ 12.64	
Weighted-average common shares outstanding (millions)				
- Basic	486.7	510.6	526.9	
- Diluted ²	489.4	513.6	530.4	

¹ Profit attributable to common shareholders.

² Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

See accompanying notes to Consolidated Financial Statements.

STATEMENT 2		Caterpillar Inc.		
Consolidated Comprehensive Income (Loss) for the Years Ended December 31, (Millions of dollars)				
	2024	2023	2022	
Profit (loss) of consolidated and affiliated companies	\$ 10,788	\$ 10,332	\$ 6,704	
Other comprehensive income (loss), net of tax (Note 17):				
Foreign currency translation:	(528)	546	(820)	
Pension and other postretirement benefits:	(12)	(10)	23	
Derivative financial instruments:	(113)	39	31	
Available-for-sale securities:	2	62	(138)	
Total other comprehensive income (loss), net of tax	(651)	637	(904)	
Comprehensive income (loss)	10,137	10,969	5,800	
Less: comprehensive income (loss) attributable to the noncontrolling interests	(4)	(3)	(1)	
Comprehensive income (loss) attributable to shareholders	\$ 10,141	\$ 10,972	\$ 5,801	
See accompanying notes to Consolidated Financial Statements.				

STATEMENT 3
Caterpillar Inc.
**Consolidated Financial Position at December 31,
(Dollars in millions)**

	2024	2023
Assets		
Current assets:		
Cash and cash equivalents	\$ 6,889	\$ 6,978
Receivables – trade and other	9,282	9,310
Receivables – finance	9,565	9,510
Prepaid expenses and other current assets	3,119	4,586
Inventories	16,827	16,565
Total current assets	45,682	46,949
Property, plant and equipment – net	13,361	12,680
Long-term receivables – trade and other	1,225	1,238
Long-term receivables – finance	13,242	12,664
Noncurrent deferred and refundable income taxes	3,312	2,816
Intangible assets	399	564
Goodwill	5,241	5,308
Other assets	5,302	5,257
Total assets	\$ 87,764	\$ 87,476
Liabilities		
Current liabilities:		
Short-term borrowings:		
Financial Products	\$ 4,393	\$ 4,643
Accounts payable	7,675	7,906
Accrued expenses	5,243	4,958
Accrued wages, salaries and employee benefits	2,391	2,757
Customer advances	2,322	1,929
Dividends payable	674	649
Other current liabilities	2,909	3,123
Long-term debt due within one year:		
Machinery, Energy & Transportation	46	1,044
Financial Products	6,619	7,719
Total current liabilities	32,272	34,728
Long-term debt due after one year:		
Machinery, Energy & Transportation	8,564	8,579
Financial Products	18,787	15,893
Liability for postemployment benefits	3,757	4,098
Other liabilities	4,890	4,675
Total liabilities	68,270	67,973
Commitments and contingencies (Notes 21 and 22)		
Shareholders' equity		
Common stock of \$1.00 par value:		
Authorized shares: 2,000,000,000		
Issued shares: (2024 and 2023 – 814,894,624 shares) at paid-in amount	6,941	6,403
Treasury stock: (2024 - 336,962,600 shares; and 2023 - 315,517,355 shares) at cost	(44,331)	(36,339)
Profit employed in the business	59,352	51,250
Accumulated other comprehensive income (loss)	(2,471)	(1,820)
Noncontrolling interests	3	9
Total shareholders' equity	19,494	19,503
Total liabilities and shareholders' equity	\$ 87,764	\$ 87,476

See accompanying notes to Consolidated Financial Statements.

STATEMENT 4
Caterpillar Inc.
Changes in Consolidated Shareholders' Equity for the Years Ended December 31
(Dollars in millions)

	Common stock	Treasury stock	Profit employed in the business	Accumulated other comprehensive income (loss)	Noncontrolling interests	Total
Balance at December 31, 2021	\$ 6,398	\$ (27,643)	\$ 39,282	\$ (1,553)	\$ 32	\$ 16,516
Profit (loss) of consolidated and affiliated companies	—	—	6,705	—	(1)	6,704
Foreign currency translation, net of tax	—	—	—	(820)	—	(820)
Pension and other postretirement benefits, net of tax	—	—	—	23	—	23
Derivative financial instruments, net of tax	—	—	—	31	—	31
Available-for-sale securities, net of tax	—	—	—	(138)	—	(138)
Dividends declared	—	—	(2,473)	—	—	(2,473)
Distribution to noncontrolling interests	—	—	—	—	(10)	(10)
Common shares issued from treasury stock for stock-based compensation: 2,340,887	(74)	125	—	—	—	51
Stock-based compensation expense	193	—	—	—	—	193
Common shares repurchased: 21,882,818	—	(4,230)	—	—	—	(4,230)
Other	43	—	—	—	1	44
Balance at December 31, 2022	\$ 6,560	\$ (31,748)	\$ 43,514	\$ (2,457)	\$ 22	\$ 15,891
Profit (loss) of consolidated and affiliated companies	—	—	10,335	—	(3)	10,332
Foreign currency translation, net of tax	—	—	—	546	—	546
Pension and other postretirement benefits, net of tax	—	—	—	(10)	—	(10)
Derivative financial instruments, net of tax	—	—	—	39	—	39
Available-for-sale securities, net of tax	—	—	—	62	—	62
Change in ownership from noncontrolling interests	—	—	—	—	(7)	(7)
Dividends declared	—	—	(2,599)	—	—	(2,599)
Common shares issued from treasury stock for stock-based compensation: 2,497,799	(112)	124	—	—	—	12
Stock-based compensation expense	208	—	—	—	—	208
Common shares repurchased: 19,466,020	—	(4,675)	—	—	—	(4,675)
Outstanding authorized accelerated share repurchase	(300)	—	—	—	—	(300)
Other	47	(40)	—	—	(3)	4
Balance at December 31, 2023	\$ 6,403	\$ (36,339)	\$ 51,250	\$ (1,820)	\$ 9	\$ 19,503

(Continued)

STATEMENT 4
Caterpillar Inc.
**Changes in Consolidated Shareholders' Equity for the Years Ended December 31
(Dollars in millions)**

	Common stock	Treasury stock	Profit employed in the business	Accumulated other comprehensive income (loss)	Noncontrolling interests	Total
Balance at December 31, 2023	\$ 6,403	\$ (36,339)	\$ 51,250	\$ (1,820)	\$ 9	\$ 19,503
Profit (loss) of consolidated and affiliated companies	—	—	10,792	—	(4)	10,788
Foreign currency translation, net of tax	—	—	—	(528)	—	(528)
Pension and other postretirement benefits, net of tax	—	—	—	(12)	—	(12)
Derivative financial instruments, net of tax	—	—	—	(113)	—	(113)
Available-for-sale securities, net of tax	—	—	—	2	—	2
Dividends declared ¹	—	—	(2,690)	—	—	(2,690)
Common shares issued from treasury stock for stock-based compensation: 1,972,037	(58)	78	—	—	—	20
Stock-based compensation expense	223	—	—	—	—	223
Common shares repurchased: 23,417,282 ²	—	(7,997)	—	—	—	(7,997)
Settlement of outstanding authorized accelerated share repurchase	300	—	—	—	—	300
Other	73	(73)	—	—	(2)	(2)
Balance at December 31, 2024	\$ 6,941	\$ (44,331)	\$ 59,352	\$ (2,471)	\$ 3	\$ 19,494

¹ Dividends per share of common stock of \$5.53, \$5.10 and \$4.71 were declared in the years ended December 31, 2024, 2023 and 2022, respectively.

² See Note 16 regarding shares repurchased.

See accompanying notes to Consolidated Financial Statements.

STATEMENT 5
Caterpillar Inc.
**Consolidated Statement of Cash Flow for the Years Ended December 31,
(Millions of dollars)**

	2024	2023	2022
Cash flow from operating activities:			
Profit of consolidated and affiliated companies	\$ 10,788	\$ 10,332	\$ 6,704
Adjustments to reconcile profit to net cash provided by operating activities:			
Depreciation and amortization	2,153	2,144	2,219
Actuarial (gain) loss on pension and postretirement benefits	(154)	(97)	(606)
Provision (benefit) for deferred income taxes	(621)	(592)	(377)
(Gain) loss on divestiture	164	572	—
Goodwill impairment charge	—	—	925
Other	564	375	701
Changes in assets and liabilities, net of acquisitions and divestitures:			
Receivables – trade and other	(160)	(437)	(220)
Inventories	(414)	(364)	(2,589)
Accounts payable	(282)	(754)	798
Accrued expenses	191	796	317
Accrued wages, salaries and employee benefits	(363)	486	90
Customer advances	370	80	768
Other assets – net	(97)	(95)	(210)
Other liabilities – net	(104)	439	(754)
Net cash provided by (used for) operating activities	12,035	12,885	7,766
Cash flow from investing activities:			
Capital expenditures – excluding equipment leased to others	(1,988)	(1,597)	(1,296)
Expenditures for equipment leased to others	(1,227)	(1,495)	(1,303)
Proceeds from disposals of leased assets and property, plant and equipment	722	781	830
Additions to finance receivables	(15,409)	(15,161)	(13,239)
Collections of finance receivables	13,608	14,034	13,177
Proceeds from sale of finance receivables	83	63	57
Investments and acquisitions (net of cash acquired)	(34)	(75)	(88)
Proceeds from sale of businesses and investments (net of cash sold)	(61)	(4)	1
Proceeds from maturities and sale of securities	3,155	1,891	2,383
Investments in securities	(1,495)	(4,405)	(3,077)
Other – net	193	97	14
Net cash provided by (used for) investing activities	(2,453)	(5,871)	(2,541)
Cash flow from financing activities:			
Dividends paid	(2,646)	(2,563)	(2,440)
Common stock issued, including treasury shares reissued	20	12	51
Payments to purchase common stock	(7,697)	(4,975)	(4,230)
Excise tax paid on purchases of common stock	(40)	—	—
Proceeds from debt issued (original maturities greater than three months):			
- Financial Products	10,283	8,257	6,674
Payments on debt (original maturities greater than three months):			
- Machinery, Energy & Transportation	(1,032)	(106)	(25)
- Financial Products	(8,284)	(6,212)	(7,703)
Short-term borrowings – net (original maturities three months or less)	(168)	(1,345)	402
Other – net	(1)	—	(10)
Net cash provided by (used for) financing activities	(9,565)	(6,932)	(7,281)
Effect of exchange rate changes on cash	(106)	(110)	(194)
Increase (decrease) in cash, cash equivalents and restricted cash	(89)	(28)	(2,250)
Cash, cash equivalents and restricted cash at beginning of period	6,985	7,013	9,263
Cash, cash equivalents and restricted cash at end of period	\$ 6,896	\$ 6,985	\$ 7,013

Cash equivalents primarily represent short-term, highly liquid investments with original maturities of generally three months or less.

See accompanying notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Operations and summary of significant accounting policies

A. Nature of operations

Information in our financial statements and related commentary are presented in the following categories:

Machinery, Energy & Transportation (ME&T) – We define ME&T as Caterpillar Inc. and its subsidiaries, excluding Financial Products. ME&T's information relates to the design, manufacturing and marketing of our products.

Financial Products – We define Financial Products as our finance and insurance subsidiaries, primarily Caterpillar Financial Services Corporation (Cat Financial) and Caterpillar Insurance Holdings Inc. (Insurance Services). Financial Products' information relates to the financing to customers and dealers for the purchase and lease of Caterpillar and other equipment.

We sell our products primarily under the brands "Caterpillar," "CAT," design versions of "CAT" and "Caterpillar," "EMD," "FG Wilson," "MWM," "Perkins," "Progress Rail," "SEM" and "Solar Turbines."

We conduct operations in our ME&T line of business under highly competitive conditions, including intense price competition. We place great emphasis on the high quality and performance of our products and our dealers' service support. Although no one competitor is believed to produce all of the same types of equipment that we do, there are numerous companies, large and small, which compete with us in the sale of each of our products.

We distribute our machines principally through a worldwide organization of dealers (dealer network), 41 located in the United States and 111 located outside the United States, serving 187 countries. We sell reciprocating engines principally through the dealer network and to other manufacturers for use in products. We also sell some of the reciprocating engines manufactured by our subsidiary Perkins Engines Company Limited through its worldwide network of 88 distributors covering 185 countries. We sell the FG Wilson branded electric power generation systems through its worldwide network of 108 distributors covering 158 countries. Our dealers do not deal exclusively with our products; however, in most cases sales and servicing of our products are the dealers' principal business. We sell some products, primarily turbines and locomotives, to end customers through sales forces employed by the company. At times, these employees are assisted by independent sales representatives.

The Financial Products line of business also conducts operations under highly competitive conditions. Financing for users of Caterpillar products is available through a variety of competitive sources, principally commercial banks and finance and leasing companies. We offer various financing, insurance and risk management products designed to support sales of our products and generate financing income for our company. We conduct a significant portion of Financial Products activity in North America, with additional offices in Latin America, Asia/Pacific, Europe and Africa.

B. Basis of presentation

The consolidated financial statements include the accounts of Caterpillar Inc. and its subsidiaries where we have a controlling financial interest.

Investments in companies where our ownership exceeds 20 percent and we do not have a controlling interest or where the ownership is less than 20 percent and for which we have a significant influence are accounted for by the equity method.

We consolidate all variable interest entities (VIEs) where Caterpillar Inc. is the primary beneficiary. The primary beneficiary of a VIE is the party that has both the power to direct the activities that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE. See Note 21 for further discussion on a consolidated VIE.

Cat Financial has end-user customers and dealers that are VIEs of which we are not the primary beneficiary. Our maximum exposure to loss from our involvement with these VIEs is limited to the credit risk inherently present in the financial support that we have provided. Credit risk was evaluated and reflected in our financial statements as part of our overall portfolio of finance receivables and related allowance for credit losses.

We include shipping and handling costs in Cost of goods sold in Statement 1. Other operating (income) expenses primarily include Cat Financial's depreciation on equipment leased to others, Insurance Services' underwriting expenses, (gains) losses on divestitures, employee separation charges, (gains) losses on disposal of long-lived assets and long-lived asset impairment charges.

Prepaid expenses and other current assets in Statement 3 primarily include investments in debt and equity securities, prepaid and refundable income taxes, right of return assets, prepaid insurance, contract assets, assets held for sale, core to be returned for remanufacturing, and restricted cash and other short-term investments.

Certain amounts for prior years have been reclassified to conform with the current-year financial statement presentation.

C. Inventories

We state inventories at the lower of cost or net realizable value. We principally determine cost using the last-in, first-out (LIFO) method. The value of inventories on the LIFO basis represented about 65 percent of total inventories at both December 31, 2024 and 2023.

If the FIFO (first-in, first-out) method had been in use, inventories would have been \$3,864 million and \$3,423 million higher than reported at December 31, 2024 and 2023, respectively.

D. Depreciation and amortization

We compute depreciation of plant and equipment principally using accelerated methods. We compute depreciation on equipment leased to others, primarily for Financial Products, using the straight-line method over the term of the lease. The depreciable basis is the original cost of the equipment less the estimated residual value of the equipment at the end of the lease term. In 2024, 2023 and 2022, Cat Financial depreciation on equipment leased to others was \$722 million, \$713 million and \$718 million, respectively, which we include in Other operating (income) expenses in Statement 1. In 2024, 2023 and 2022, consolidated depreciation expense was \$1,983 million, \$1,929 million and \$1,937 million, respectively. We compute amortization of purchased finite-lived intangibles principally using the straight-line method, generally not to exceed a period of 20 years.

E. Foreign currency translation

The functional currency for most of our ME&T consolidated subsidiaries is the U.S. dollar. The functional currency for most of our Financial Products consolidated subsidiaries is the respective local currency. We include gains and losses resulting from the remeasurement of foreign currency amounts to the functional currency in Other income (expense) in Statement 1. We include gains and losses resulting from translating assets and liabilities from the functional currency to U.S. dollars in Accumulated other comprehensive income (loss) (AOCI) in Statement 3.

F. Derivative financial instruments

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates, interest rates, commodity prices and certain deferred compensation plan liabilities. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to prudently manage foreign currency exchange rate, interest rate, commodity price and certain deferred compensation plan liability exposures. Our policy specifies that derivatives are not to be used for speculative purposes. Derivatives that we use are primarily foreign currency forward, option and cross currency contracts, interest rate contracts, commodity forward and option contracts and total return swap contracts. All derivatives are recorded at fair value. See Note 4 for more information.

G. Income taxes

We determine the provision for income taxes using the asset and liability approach taking into account guidance related to uncertain tax positions. Tax laws require items to be included in tax filings at different times than the items are reflected in the financial statements. We recognize a current liability for the estimated taxes payable for the current year. Deferred taxes represent the future tax consequences expected to occur when the reported amounts of assets and liabilities are recovered or paid. We adjust deferred taxes for enacted changes in tax rates and tax laws. We record valuation allowances to reduce deferred tax assets when it is more likely than not that a tax benefit will not be realized. See Note 6 for further discussion.

H. Goodwill

For acquisitions accounted for as a business combination, goodwill represents the excess of the cost over the fair value of the net assets acquired. We are required to test goodwill for impairment, at the reporting unit level, annually and when events or circumstances make it more likely than not that an impairment may have occurred. A reporting unit is an operating segment or one level below an operating segment (referred to as a component) to which goodwill is assigned when initially recorded. We assign goodwill to reporting units based on our integration plans and the expected synergies resulting from the acquisition. Because Caterpillar is a highly integrated company, the businesses we acquire are sometimes combined with or integrated into existing reporting units. When changes occur in the composition of our operating segments or reporting units, we reassign goodwill to the affected reporting units based on their relative fair values.

We perform our annual goodwill impairment test as of October 1 and monitor for interim triggering events on an ongoing basis. We review goodwill for impairment utilizing either a qualitative assessment or a quantitative goodwill impairment test. If we choose to perform a qualitative assessment and determine the fair value more likely than not exceeds the carrying value, no further evaluation is necessary. For reporting units where we perform the quantitative goodwill impairment test, we compare the fair value of each reporting unit, which we primarily determine using an income approach based on the present value of discounted cash flows, to the respective carrying value, which includes goodwill. If the fair value of the reporting unit exceeds its carrying value, we do not consider the goodwill impaired. If the carrying value is higher than the fair value, we would recognize the difference as an impairment loss. See Note 10 for further details.

I. Estimates in financial statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect reported amounts. The more significant estimates include: residual values for leased assets, fair values for goodwill impairment tests, warranty liability and reserves for product liability and insurance losses, postretirement benefits, post-sale discounts, credit losses and income taxes.

J. New accounting guidance

A. Adoption of new accounting standards

Segment reporting (ASU 2023-07) — In November 2023, the Financial Accounting Standards Board (FASB) issued accounting guidance that requires incremental disclosures related to reportable segments which includes significant segment expense categories and amounts for each reportable segment. The expanded annual disclosures were effective for our year ending December 31, 2024, and the expanded interim disclosures are effective in 2025 and will be applied retrospectively to all prior periods presented.

We consider the applicability and impact of all ASUs. We adopted the following ASUs effective January 1, 2024, none of which had a material impact on our financial statements:

<u>ASU</u>	<u>Description</u>
2022-03	Fair value measurement – Equity securities subject to contractual sale restrictions
2023-01	Leases – Common control arrangements
2023-02	Accounting for investments in tax credit structures using the proportional amortization method

B. Accounting standards issued but not yet adopted

Income tax reporting (ASU 2023-09) — In December 2023, the FASB issued accounting guidance to expand the annual disclosure requirements for income taxes, primarily related to the rate reconciliation and income taxes paid. The expanded disclosures are effective for our year ending December 31, 2025 and can be applied prospectively or retrospectively. We are in the process of evaluating the effect of this new guidance on the related disclosures.

Disaggregation of income statement expenses (ASU 2024-03) — In November 2024, the FASB issued accounting guidance to enhance transparency into the nature and function of income statement expenses. The amendments require that, on an annual and interim basis, entities disclose disaggregated operating expense information about specific categories, including purchases of inventory, employee compensation, depreciation and amortization. The expanded

annual disclosures are effective for our year ending December 31, 2027, and the expanded interim disclosures are effective in 2028, with early adoption permitted. We are in the process of evaluating the effect of this new guidance on the related disclosures.

All other ASUs issued but not yet adopted were assessed and determined that they either were not applicable or were not expected to have a material impact on our financial statements.

2. Sales and revenue recognition

A. Sales of Machinery, Energy & Transportation

We recognize sales of ME&T when all the following criteria are satisfied: (i) a contract with an independently owned and operated dealer or an end user exists which has commercial substance; (ii) it is probable we will collect the amount charged to the dealer or end user; and (iii) we have completed our performance obligation whereby the dealer or end user has obtained control of the product. A contract with commercial substance exists once we receive and accept a purchase order under a dealer sales agreement, or once we enter into a contract with an end user. If collectibility is not probable, the sale is deferred and not recognized until collection is probable or payment is received. Control of our products typically transfers when title and risk of ownership of the product has transferred to the dealer or end user. Typically, where product is produced and sold in the same country, title and risk of ownership transfer when we ship the product. Products that are exported from a country for sale typically transfer title and risk of ownership at the border of the destination country.

Our remanufacturing operations are primarily focused on the remanufacture of Cat engines and components and rail related products. In this business, we inspect, clean and remanufacture used engines and related components (core). In connection with the sale of our remanufactured product to dealers, we collect a deposit that is repaid if the dealer returns an acceptable core within a specified time period. Caterpillar owns and has title to the cores when they are returned from dealers. The rebuilt engine or component (the core plus any new content) is then sold as a remanufactured product to dealers and end users. We recognize revenue pursuant to the same transfer of control criteria as ME&T sales noted above. At the time of sale, we recognize the deposit in Other current liabilities in Statement 3, and we recognize the core to be returned as an asset in Prepaid expenses and other current assets in Statement 3 at the estimated replacement cost (based on historical experience with usable cores). Upon receipt of an acceptable core, we repay the deposit and relieve the liability. We then transfer the returned core asset into inventory. In the event that the deposit is forfeited (i.e., upon failure by the dealer to return an acceptable core in the specified time period), we recognize the core deposit and the cost of the core in Sales and Cost of goods sold, respectively.

We provide discounts to dealers through merchandising programs. We have numerous programs that are designed to promote the sale of our products. The most common dealer programs provide a discount when the dealer sells a product to a targeted end user. Generally, we estimate the cost of these discounts for each product by model by geographic region based on historical experience and known changes in merchandising programs. We report the cost of these discounts as a reduction to the transaction price when we recognize the product sale. We accrue a corresponding post-sale discount reserve in Statement 3, which represents discounts we expect to pay on units sold. If discounts paid differ from those estimated, we report the difference as a change in the transaction price.

Except for replacement parts, no right of return exists on the sale of our products. We estimate replacement part returns based on historical experience and recognize a parts return asset in Prepaid expenses and other current assets in Statement 3, which represents our right to recover replacement parts we expect will be returned. We also recognize a refund liability in Accrued expenses in Statement 3 for the refund we expect to pay for returned parts. If actual replacement part returns differ from those estimated, we recognize the difference in the estimated replacement part return asset and refund liability in Cost of goods sold and Sales, respectively.

Trade receivables represent amounts due from dealers and end users for the sale of our products, and include amounts due from wholesale inventory financing provided by Cat Financial for a dealer's purchase of inventory. See Note 7 for further information. We recognize trade receivables from dealers and end users in Receivables – trade and other and Long-term receivables – trade and other in Statement 3. Trade receivables from dealers and end users were \$7,864 million, \$7,923 million and \$7,551 million as of December 31, 2024, 2023 and 2022, respectively. Long-term trade receivables from dealers and end users were \$640 million, \$589 million and \$506 million as of December 31, 2024, 2023 and 2022, respectively.

Our standard dealer invoice terms are established by marketing region. Our invoice terms for end user sales are established by the responsible business unit. Payments from dealers are due shortly after the time of sale. When we make a sale to a

dealer, the dealer is responsible for payment even if the product is not sold to an end user. Dealers and end users must make payment within the established invoice terms to avoid potential interest costs. Interest at or above prevailing market rates may be charged on any past due balance, and generally our practice is to not forgive this interest. Regular credit evaluations of our dealers and end users are performed. Collateral generally is not required, and the majority of our trade receivables are unsecured. Various devices, such as security agreements and letters of credit, are used to protect our interests, when deemed necessary. No single dealer or end user represents a significant concentration of credit risk. Our allowance for credit losses is not significant for ME&T receivables.

For certain contracts, we invoice for payment when contractual milestones are achieved. We recognize a contract asset when a sale is recognized before achieving the contractual milestone for invoicing. We reduce the contract asset when we invoice for payment and recognize a corresponding trade receivable. Contract assets are included in Prepaid expenses and other current assets in Statement 3. Contract assets were \$238 million, \$246 million and \$247 million as of December 31, 2024, 2023 and 2022, respectively.

We invoice in advance of recognizing the sale of certain products. We recognize advanced customer payments as a contract liability in Customer advances and Other liabilities in Statement 3. Contract liabilities were \$2,745 million, \$2,389 million and \$2,314 million as of December 31, 2024, 2023 and 2022, respectively. We reduce the contract liability when we recognize revenue. During 2024, we recognized \$1,591 million of revenue that was recorded as a contract liability at the beginning of 2024. During 2023, we recognized \$1,660 million of revenue that was recorded as a contract liability at the beginning of 2023.

We have elected the practical expedient to not adjust the amount of revenue to be recognized under a contract with a dealer or end user for the effects of time value of money when the timing difference between receipt of payment and recognition of revenue is less than one year.

As of December 31, 2024, we have entered into contracts with dealers and end users for which sales have not been recognized as we have not satisfied our performance obligations and transferred control of the products. The dollar amount of unsatisfied performance obligations for contracts with an original duration greater than one year is \$15.2 billion, with about one-half of the amount expected to be completed and revenue recognized in the twelve months following December 31, 2024. We have elected the practical expedient to not disclose unsatisfied performance obligations with an original contract duration of one year or less. Contracts with an original duration of one year or less are primarily sales to dealers for machinery, engines and replacement parts.

We exclude sales and other related taxes from the transaction price. We account for shipping and handling costs associated with outbound freight after control over a product has transferred as a fulfillment cost which is included in Cost of goods sold.

We provide a standard manufacturer's warranty of our products at no additional cost. At the time we recognize a sale, we record estimated future warranty costs. See Note 21 for further discussion of our product warranty liabilities.

See Note 23 for further disaggregated sales and revenues information.

B. Revenues of Financial Products

Revenues of Financial Products are generated primarily from finance revenue on finance receivables and rental payments on operating leases. We record finance revenue over the life of the related finance receivables using the interest method, including the accretion of certain direct origination costs that are deferred. Operating lease revenue is recorded on a straight-line basis over the term of the lease.

We suspend recognition of finance revenue and operating lease revenue and place the account on non-accrual status when management determines that collection of future income is not probable (generally after 120 days past due). We resume recognition of revenue, and recognize previously suspended income, when we consider collection of remaining amounts to be probable. Payments received while the finance receivable is on non-accrual status are applied to interest and principal in accordance with the contractual terms. We write off interest earned but uncollected prior to the receivables being placed on non-accrual status through Provision for credit losses when, in the judgment of management, we consider it to be uncollectible. See Note 7 for more information.

3. Stock-based compensation

Our stock-based compensation plans primarily provide for the granting of stock options, restricted stock units (RSUs) and performance-based restricted stock units (PRSUs) to Officers and other key employees, as well as non-employee Directors. Stock options permit a holder to buy Caterpillar stock at the stock's price when the option was granted. RSUs are agreements to issue shares of Caterpillar stock at the time of vesting. PRSUs are similar to RSUs and include performance conditions in the vesting terms of the award.

Our long-standing practices and policies specify that the Compensation Committee (the Committee) of the Board of Directors approve all stock-based compensation awards. The award approval process specifies the grant date, value and terms of the award. We consistently apply the same terms and conditions to all employee grants, including Officers. The Committee approves all individual Officer grants. We determine the number of stock-based compensation award units included in an individual's award based on the methodology approved by the Committee. The exercise price methodology approved by the Committee is the closing price of the Company stock on the date of the grant. In June of 2014, shareholders approved the Caterpillar Inc. 2014 Long-Term Incentive Plan (the 2014 Plan) under which all new stock-based compensation awards were granted. In June of 2023, shareholders approved the Caterpillar Inc. 2023 Long-Term Incentive Plan (the 2023 Plan), which superseded and replaced the 2014 Plan.

Common stock issued from Treasury stock under the plans totaled 1,972,037 for 2024, 2,497,799 for 2023 and 2,340,887 for 2022. The total number of shares authorized for equity awards under the 2023 Plan is 42,500,000. As of December 31, 2024, 40,873,176 shares remained available for issuance, which includes shares returned to the 2023 Plan upon cancellation or shares withheld for taxes incurred in connection with issuance or vesting of grants made under the 2014 Plan.

Stock option and RSU awards generally vest according to a three-year graded vesting schedule. One-third of the award will become vested on the first anniversary of the grant date, one-third of the award will become vested on the second anniversary of the grant date and one-third of the award will become vested on the third anniversary of the grant date. PRSU awards generally have a three-year performance period and cliff vest at the end of the period based upon achievement of performance targets established at the time of grant.

Upon separation from service, if the participant is 55 years of age or older with more than five years of service, the participant meets the criteria for a "Long Service Separation." Award terms for stock option and RSU grants allow for continued vesting as of each vesting date specified in the award document for employees who meet the criteria for a "Long Service Separation" and fulfill a requisite service period of six months. We recognize compensation expense for eligible employees for the grants over the period from the grant date to the end date of the six-month requisite service period. For employees who become eligible for a "Long Service Separation" subsequent to the end date of the six-month requisite service period and prior to the completion of the vesting period, we recognized compensation expense over the period from the grant date to the date eligibility is achieved.

Award terms for PRSU grants allow for continued vesting upon achievement of the performance target specified in the award document for employees who meet the criteria for a "Long Service Separation" and fulfill a requisite service period of six months. We recognize compensation expense for the PRSU grants with respect to employees who have met the criteria for a "Long Service Separation" over the period from the grant date to the end of the six-month requisite service period. For employees who become eligible for a "Long Service Separation" subsequent to the end date of the six-month requisite service period and prior to the completion of the vesting period, we recognize compensation expense over the period from the grant date to the date eligibility is achieved.

At grant, option awards have a term life of ten years. For awards granted prior to 2016, if the "Long Service Separation" criteria are met, the vested options have a life that is the lesser of ten years from the original grant date or five years from the separation date. For awards granted beginning in 2016, the vested options have a life equal to ten years from the original grant date.

Accounting guidance on share-based payments requires companies to estimate the fair value of options on the date of grant using an option-pricing model. The fair value of our option grants was estimated using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model considers a range of assumptions related to volatility, risk-free interest rate and historical employee behavior. Expected volatility was based on historical Caterpillar stock price movement and current implied volatilities from traded options on Caterpillar stock. The risk-free interest rate was based on U.S. Treasury security yields at the time of grant. The weighted-average dividend yield was based on historical information. We determine the expected life from the actual historical employee exercise behavior. The following table provides the assumptions used in determining the fair value of the option awards for the years ended December 31, 2024, 2023 and 2022, respectively.

	Grant Year					
	2024		2023		2022	
Weighted-average dividend yield	2.40	%	2.60	%	2.60	%
Weighted-average volatility	30.7	%	31.0	%	31.7	%
Range of volatilities	26.3%-32.3%		28.5%-35.5%		25.3%-36.8%	
Range of risk-free interest rates	4.28%-5.03%		3.92%-5.03%		1.03%-2.00%	
Weighted-average expected lives	7 years		7 years		8 years	

We credit RSU and PRSU awards with dividend equivalent units on each date that we pay a cash dividend to holders of common stock. We determine the fair value of the RSU awards granted in 2024, 2023 and 2022 as the closing stock price on the date of the grant.

The PRSUs granted in 2024 contain a market condition, and a Monte Carlo simulation was utilized to estimate the fair value of the awards. The following table provides the assumptions used in determining the fair value of the PRSUs granted in 2024.

	Grant Year 2024
Expected volatility of the Company's stock	29.8%
Risk-free interest rate	4.38%

We determine the fair value of the PRSU awards granted in 2023 and 2022 as the closing stock price on the date of the grant.

Please refer to Tables I and II below for additional information on our stock-based compensation awards.

TABLE I — Financial Information Related to Stock-based Compensation

	Stock options			
	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value ¹
Outstanding at January 1, 2024	5,141,363	\$ 169.57		
Granted to officers and key employees	296,295	\$ 338.65		
Exercised	(1,679,281)	\$ 141.77		
Forfeited / expired	(25,515)	\$ 202.08		
Outstanding at December 31, 2024	3,732,862	\$ 195.28	6.00	\$ 625
Exercisable at December 31, 2024	2,608,265	\$ 167.72	5.08	\$ 509

¹ The difference between a stock award's exercise price and the underlying stock's closing market price at December 31, 2024, for awards with market price greater than the exercise price. Amounts are in millions of dollars.

	RSUs		PRSUs	
	Shares	Weighted-Average Grant Date Fair Value	Shares	Weighted-Average Grant Date Fair Value
Outstanding at January 1, 2024	829,386	\$ 226.44	480,759	\$ 223.09
Granted to officers and key employees	391,784	\$ 338.65	178,236	\$ 408.64
Vested	(427,095)	\$ 221.56	(259,136)	\$ 196.70
Forfeited / expired	(17,438)	\$ 282.89	(9,846)	\$ 269.79
Outstanding at December 31, 2024	776,637	\$ 284.36	390,013	\$ 321.58

The computations of weighted-average exercise prices and aggregate intrinsic values are not applicable to RSUs or PRSUs since these awards represent an agreement to issue shares of stock at the time of vesting. At December 31, 2024, there were 776,637 outstanding RSUs with a weighted average remaining contractual life of 1.5 years and 390,013 outstanding PRSUs with a weighted-average remaining contractual life of 1.4 years.

TABLE II—Additional Stock-based Award Information

(Dollars in millions except per share data)	2024	2023	2022
Stock options activity:			
Weighted-average fair value per share of stock awards granted	\$ 104.27	\$ 75.79	\$ 51.69
Intrinsic value of stock awards exercised	\$ 354	\$ 356	\$ 217
Fair value of stock awards vested ¹	\$ 56	\$ 53	\$ 56
Cash received from stock awards exercised	\$ 113	\$ 98	\$ 123
RSUs activity:			
Weighted-average fair value per share of stock awards granted	\$ 338.65	\$ 252.24	\$ 196.06
Fair value of stock awards vested ²	\$ 144	\$ 126	\$ 105
PRSUs activity:			
Weighted-average fair value per share of stock awards granted	\$ 408.64	\$ 251.97	\$ 195.17
Fair value of stock awards vested ²	\$ 94	\$ 80	\$ 90

¹ Based on the grant date fair value.

² Based on the underlying stock's closing market price on the vesting date.

In accordance with guidance on share-based payments, stock-based compensation expense is based on the grant date fair value and is classified within Cost of goods sold, Selling, general and administrative expenses and Research and development expenses corresponding to the same line item as the cash compensation paid to respective employees, officers and non-employee directors. We recognize stock-based compensation expense on a straight-line basis over the requisite service period for awards with terms that specify cliff or graded vesting and contain only service conditions. Stock-based compensation expense for PRSUs is based on the probable number of shares expected to vest and is recognized primarily on a straight-line basis.

Before tax, stock-based compensation expense for 2024, 2023 and 2022 was \$223 million, \$208 million and \$193 million, respectively, with a corresponding income tax benefit of \$30 million, \$33 million and \$32 million, respectively.

The amount of stock-based compensation expense capitalized for the years ended December 31, 2024, 2023 and 2022 did not have a significant impact on our financial statements.

At December 31, 2024, there was \$148 million of total unrecognized compensation cost from stock-based compensation arrangements granted under the plans, which is related to non-vested stock-based awards. We expect to recognize the compensation expense over a weighted-average period of approximately 1.8 years.

We currently use shares in Treasury stock to satisfy share award exercises.

The cash tax benefits realized from stock awards exercised for 2024, 2023 and 2022 were \$90 million, \$89 million and \$63 million, respectively. We use the direct only method and tax law ordering approach to calculate the tax effects of stock-based compensation.

4. Derivative financial instruments and risk management

Our earnings and cash flow are subject to fluctuations due to changes in foreign currency exchange rates, interest rates, commodity prices and certain deferred compensation plan liabilities. Our Risk Management Policy (policy) allows for the use of derivative financial instruments to prudently manage foreign currency exchange rate, interest rate, commodity price and certain deferred compensation plan liability exposures. Our policy specifies that derivatives are not to be used for speculative purposes. Derivatives that we use are primarily foreign currency forward, option and cross currency contracts, interest rate contracts, commodity forward and option contracts and total return swap contracts. Our derivative activities are subject to the management, direction and control of our senior financial officers. We present at least annually to the Audit Committee of the Board of Directors on our risk management practices, including our use of financial derivative instruments.

We recognize all derivatives at their fair value in Statement 3. On the date the derivative contract is entered into, we designate the derivative as (1) a hedge of the fair value of a recognized asset or liability (fair value hedge), (2) a hedge of a forecasted transaction or the variability of cash flow (cash flow hedge) or (3) an undesignated instrument. We record in current earnings changes in the fair value of a derivative that is qualified, designated and highly effective as a fair value hedge, along with the gain or loss on the hedged recognized asset or liability that is attributable to the hedged risk. For foreign exchange contracts designated as fair value hedges, the interim settlements are excluded from the effectiveness assessment and are recognized under a systematic and rational method over the life of the hedging instrument within Interest expense. We record in AOCI changes in the fair value of a derivative that is qualified, designated and highly effective as a cash flow hedge, to the extent effective, in Statement 3 until we reclassify them to earnings in the same period or periods during which the hedged transaction affects earnings. We report changes in the fair value of undesignated derivative instruments in current earnings. We classify cash flows from designated derivative financial instruments within the same category as the item being hedged on Statement 5. We include cash flows from undesignated derivative financial instruments in the investing category on Statement 5.

We formally document all relationships between hedging instruments and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value hedges to specific assets and liabilities in Statement 3 and linking cash flow hedges to specific forecasted transactions or variability of cash flow.

We also formally assess, both at the hedge's inception and on an ongoing basis, whether the designated derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flow of hedged items. When a derivative is determined not to be highly effective as a hedge or the underlying hedged transaction is no longer probable, we discontinue hedge accounting prospectively, in accordance with the derecognition criteria for hedge accounting.

A. Foreign currency exchange rate risk

Foreign currency exchange rate movements create a degree of risk by affecting the U.S. dollar value of sales made and costs incurred in foreign currencies. Movements in foreign currency rates also affect our competitive position as these changes may affect business practices and/or pricing strategies of non-U.S.-based competitors. Additionally, we have balance sheet positions denominated in foreign currencies, thereby creating exposure to movements in exchange rates.

Our ME&T operations purchase, manufacture and sell products in many locations around the world. As we have a diversified revenue and cost base, we manage our future foreign currency cash flow exposure on a net basis. We use foreign currency forward and option contracts to manage unmatched foreign currency cash inflow and outflow. Our objective is to minimize the risk of exchange rate movements that would reduce the U.S. dollar value of our foreign currency cash flow. Our policy allows for managing anticipated foreign currency cash flow for up to approximately five years. As of December 31, 2024, the maximum term of these outstanding contracts at inception was approximately 60 months.

We generally designate as cash flow hedges at inception of the contract any foreign currency forward or option contracts that meet the requirements for hedge accounting and the maturity extends beyond the current quarter-end. We perform designation on a specific exposure basis to support hedge accounting. The remainder of ME&T foreign currency contracts are undesignated.

In managing foreign currency risk for our Financial Products operations, our objective is to minimize earnings volatility resulting from conversion and the remeasurement of net foreign currency balance sheet positions and future transactions denominated in foreign currencies. Our policy allows the use of foreign currency forward, option and cross currency contracts to offset the risk of currency mismatch between our assets and liabilities and exchange rate risk associated with future transactions denominated in foreign currencies. Our foreign currency forward and option contracts are primarily undesignated. We designate fixed-to-fixed cross currency contracts as cash flow hedges to protect against movements in exchange rates on foreign currency fixed-rate assets and liabilities. We designate float-to-float cross currency contracts as fair value hedges to protect against movements in exchange rates on floating-rate assets and liabilities.

B. Interest rate risk

Interest rate movements create a degree of risk by affecting the amount of our interest payments and the value of our fixed-rate debt. Our practice is to use interest rate contracts to manage our exposure to interest rate changes.

Our ME&T operations generally use fixed-rate debt as a source of funding. Our objective is to minimize the cost of borrowed funds. Our policy allows us to enter into fixed-to-floating interest rate contracts and forward rate agreements to meet that objective. We designate fixed-to-floating interest rate contracts as fair value hedges at inception of the contract, and we designate certain forward rate agreements as cash flow hedges at inception of the contract.

Financial Products operations has a match-funding policy that addresses interest rate risk by aligning the interest rate profile (fixed or floating rate and duration) of Cat Financial's debt portfolio with the interest rate profile of our receivables portfolio within predetermined ranges on an ongoing basis. In connection with that policy, we use interest rate derivative instruments to modify the debt structure to match assets within the receivables portfolio. This matched funding reduces the volatility of margins between interest-bearing assets and interest-bearing liabilities, regardless of which direction interest rates move.

Our policy allows us to use fixed-to-floating, floating-to-fixed and floating-to-floating interest rate contracts to meet the match-funding objective. We designate fixed-to-floating interest rate contracts as fair value hedges to protect debt against changes in fair value due to changes in the benchmark interest rate. We designate most floating-to-fixed interest rate contracts as cash flow hedges to protect against the variability of cash flows due to changes in the benchmark interest rate.

We have, at certain times, liquidated fixed-to-floating and floating-to-fixed interest rate contracts at both ME&T and Financial Products. We amortize the gains or losses associated with these contracts at the time of liquidation into earnings over the original term of the previously designated hedged item.

C. Commodity price risk

Commodity price movements create a degree of risk by affecting the price we must pay for certain raw materials. Our policy is to use commodity forward and option contracts to manage the commodity risk and reduce the cost of purchased materials.

Our ME&T operations purchase base and precious metals embedded in the components we purchase from suppliers. Our suppliers pass on to us price changes in the commodity portion of the component cost. In addition, we are subject to price changes on energy products such as natural gas and diesel fuel purchased for operational use.

Our objective is to minimize volatility in the price of these commodities. Our policy allows us to enter into commodity forward and option contracts to lock in the purchase price of a portion of these commodities within a five-year horizon. All such commodity forward and option contracts are undesignated.

D. Deferred compensation plan liability risk

We are also exposed to variability in compensation expense related to certain non-qualified deferred compensation obligations to employees. We utilize total return swaps to economically hedge this exposure to offset the related compensation expense. All such total return swap contracts are undesignated.

The location and fair value of derivative instruments reported in Statement 3 were as follows:

(Millions of dollars)	Fair Value			
	December 31, 2024		December 31, 2023	
	Assets ¹	Liabilities ²	Assets ¹	Liabilities ²
Designated derivatives				
Foreign exchange contracts	\$ 357	\$ (275)	\$ 389	\$ (155)
Interest rate contracts	10	(201)	58	(209)
Total	<u>\$ 367</u>	<u>\$ (476)</u>	<u>\$ 447</u>	<u>\$ (364)</u>
Undesignated derivatives				
Foreign exchange contracts	\$ 91	\$ (56)	\$ 55	\$ (82)
Commodity contracts	4	(6)	18	(9)
Total return swap contracts	—	(33)	—	—
Total	<u>\$ 95</u>	<u>\$ (95)</u>	<u>\$ 73</u>	<u>\$ (91)</u>

¹ Assets are classified as Receivables - trade and other or Long-term receivables - trade and other.

² Liabilities are classified as Accrued expenses or Other liabilities.

The total notional amounts of the derivative instruments as of December 31, 2024 and 2023 were \$27.0 billion and \$25.6 billion, respectively. The notional amounts of the derivative financial instruments do not represent amounts exchanged by the parties. We calculate the amounts exchanged by the parties by referencing the notional amounts and by other terms of the derivatives, such as foreign currency exchange rates, interest rates, commodity prices or certain deferred compensation plan liabilities.

Gains (losses) on derivative instruments are categorized as follows:

(Millions of dollars)	Years ended December 31,								
	Fair Value / Undesignated Hedges			Cash Flow Hedges					
	Gains (Losses) Recognized in Statement 1 ¹			Gains (Losses) Recognized in AOCI			Gains (Losses) Reclassified from AOCI ²		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
Foreign exchange contracts	\$ 162	\$ 12	\$ (57)	\$ 53	\$ 39	\$ 264	\$ 168	\$ (58)	\$ 329
Interest rate contracts	(139)	(135)	(6)	11	9	111	39	55	11
Commodity contracts	(10)	10	51	—	—	—	—	—	—
Total return swap contracts	40	—	—	—	—	—	—	—	—
Total	\$ 53	\$ (113)	\$ (12)	\$ 64	\$ 48	\$ 375	\$ 207	\$ (3)	\$ 340

¹ Foreign exchange contract, Commodity contract and Total return swap contract gains (losses) are included in Other income (expense). Interest rate contract gains (losses) are included in Interest expense of Financial Products and Interest expense excluding Financial Products.

² Foreign exchange contract gains (losses) are primarily included in Other income (expense). Interest rate contract gains (losses) are primarily included in Interest expense of Financial Products.

The following amounts were recorded in Statement 3 related to cumulative basis adjustments for fair value hedges:

(Millions of dollars)	Years ended December 31,				
	Carrying Value of the Hedged Liabilities		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Value of the Hedged Liabilities		
	2024	2023	2024	2023	
Long-term debt due within one year	\$ 483	\$ 982	\$ (16)	\$ (23)	
Long-term debt due after one year	5,327	4,245	(170)	(156)	
Total	\$ 5,810	\$ 5,227	\$ (186)	\$ (179)	

We enter into International Swaps and Derivatives Association (ISDA) master netting agreements within ME&T and Financial Products that permit the net settlement of amounts owed under their respective derivative contracts. Under these master netting agreements, net settlement generally permits the company or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements may also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event. Our exposure to credit loss in the event of nonperformance by the counterparties is limited to only those gains that we have recorded, but for which we have not yet received cash payment.

Collateral is typically not required of the counterparties or of our company under the master netting agreements. As of December 31, 2024 and 2023, no cash collateral was received or pledged under the master netting agreements.

The effect of the net settlement provisions of the master netting agreements on our derivative balances upon an event of default or termination event was as follows:

(Millions of dollars)	December 31, 2024		December 31, 2023	
	Assets	Liabilities	Assets	Liabilities
Gross Amounts Recognized	\$ 462	\$ (571)	\$ 520	\$ (455)
Financial Instruments Not Offset	(186)	186	(202)	202
Net Amount	\$ 276	\$ (385)	\$ 318	\$ (253)

5. Other income (expense)

(Millions of dollars)	Years ended December 31,		
	2024	2023	2022
Investment and interest income	\$ 482	\$ 494	\$ 167
Foreign exchange gains (losses) ¹	71	(96)	104
License fee income	142	146	142
Gains (losses) on securities	39	11	(56)
Net periodic pension and OPEB income (cost), excluding service cost	165	47	868
Miscellaneous income (loss)	(86)	(7)	66
Total	\$ 813	\$ 595	\$ 1,291

¹ Includes gains (losses) from foreign exchange derivative contracts. See Note 4 for further details.

6. Income taxes

Reconciliation of the U.S. federal statutory rate to effective rate:

(Millions of dollars)	Years ended December 31,					
	2024		2023		2022	
Taxes at U.S. statutory rate	\$ 2,809	21.0 %	\$ 2,740	21.0 %	\$ 1,838	21.0 %
(Decreases) increases resulting from:						
Non-U.S. subsidiaries taxed at other than the U.S. rate	186	1.4 %	129	1.0 %	184	2.1 %
State and local taxes, net of federal ¹	121	0.9 %	93	0.7 %	91	1.0 %
U.S. tax incentives	(245)	(1.8)%	(170)	(1.3)%	(166)	(1.9)%
Tax law change related to currency translation	(224)	(1.7)%	—	—%	—	—%
Nondeductible goodwill	—	—%	—	—%	159	1.8 %
Other—net	(18)	(0.1)%	(11)	(0.1)%	(39)	(0.4)%
Provision (benefit) for income taxes	\$ 2,629	19.7 %	\$ 2,781	21.3 %	\$ 2,067	23.6 %

¹ Excludes amount included in nondeductible goodwill and tax law change related to currency translation line items.

The provision for income taxes for 2024 included a non-cash tax benefit of \$224 million due to the reversal of a deferred tax liability from a U.S. tax law change related to currency translation. The negative impact on the 2022 effective rate from the portion of the goodwill impairment not deductible for tax purposes is reported in the effective tax rate reconciliation line item above labeled “Nondeductible goodwill.” Included in the line item above labeled “Non-U.S. subsidiaries taxed at other than the U.S. rate” are the effects of local and U.S. taxes related to earnings of non-U.S. subsidiaries, changes in the amount of unrecognized tax benefits associated with these earnings, losses at non-U.S. subsidiaries without local tax benefits due to valuation allowances and other permanent differences between tax and U.S. GAAP results.

Distributions of profits from non-U.S. subsidiaries are not expected to cause a significant incremental U.S. tax impact in the future. However, these distributions may be subject to non-U.S. withholding taxes if profits are distributed from certain jurisdictions. Undistributed profits of non-U.S. subsidiaries of approximately \$15 billion are considered indefinitely reinvested. Determination of the amount of unrecognized deferred tax liability related to indefinitely reinvested profits is not feasible primarily due to our legal entity structure and the complexity of U.S. and local tax laws.

The components of profit (loss) before taxes were:

(Millions of dollars)	Years ended December 31,		
	2024	2023	2022
U.S.	\$ 6,219	\$ 6,463	\$ 2,962
Non-U.S.	7,154	6,587	5,790
	<u>\$ 13,373</u>	<u>\$ 13,050</u>	<u>\$ 8,752</u>

Profit before taxes, as shown above, is based on the location of the entity to which such earnings are attributable. Where an entity's earnings are subject to taxation, however, may not correlate solely to where an entity is located. Thus, the income tax provision shown below as U.S. or non-U.S. may not correspond to the earnings shown above.

The components of the provision (benefit) for income taxes were:

(Millions of dollars)	Years ended December 31,		
	2024	2023	2022
Current tax provision (benefit):			
U.S. ¹	\$ 1,584	\$ 1,627	\$ 1,055
Non-U.S.	1,531	1,592	1,255
State (U.S.)	135	154	134
	<u>3,250</u>	<u>3,373</u>	<u>2,444</u>
Deferred tax provision (benefit):			
U.S. ¹	(553)	(391)	(404)
Non-U.S.	(69)	(164)	50
State (U.S.)	1	(37)	(23)
	<u>(621)</u>	<u>(592)</u>	<u>(377)</u>
Total provision (benefit) for income taxes	<u>\$ 2,629</u>	<u>\$ 2,781</u>	<u>\$ 2,067</u>

¹ Includes U.S. taxes related to non-U.S. earnings. We account for U.S. taxes on global intangible low-taxed income as a period cost.

We paid net income tax and related interest of \$3,126 million, \$2,949 million and \$3,076 million in 2024, 2023 and 2022, respectively.

Accounting for income taxes under U.S. GAAP requires that individual tax-paying entities of the company offset all deferred tax liabilities and assets within each particular tax jurisdiction and present them as a noncurrent deferred tax liability or asset in the Consolidated Financial Position. Amounts in different tax jurisdictions cannot be offset against each other. The amount of deferred income taxes at December 31, included on the following lines in Statement 3, were as follows:

(Millions of dollars)	December 31,	
	2024	2023
Assets:		
Noncurrent deferred and refundable income taxes	\$ 3,191	\$ 2,634
Liabilities:		
Other liabilities	432	454
Deferred income taxes—net	<u>\$ 2,759</u>	<u>\$ 2,180</u>

The components of deferred tax assets and liabilities were:

(Millions of dollars)	December 31,	
	2024	2023
Deferred income tax assets:		
Research expenditures	\$ 1,735	\$ 1,350
Tax carryforwards	1,346	1,389
Postemployment benefits	560	656
Employee compensation and benefits	531	634
Warranty reserves	303	325
Post sale discounts	260	253
Inventory valuation	183	138
Lease obligations	151	144
Other—net	288	205
	<u>5,357</u>	<u>5,094</u>
Deferred income tax liabilities:		
Capital and intangible assets, including lease basis differences	(1,270)	(1,312)
Other outside basis differences	(253)	(267)
Undistributed profits, including translation adjustments	(201)	(401)
	<u>(1,724)</u>	<u>(1,980)</u>
Valuation allowance for deferred tax assets	(874)	(934)
Deferred income taxes—net	<u>\$ 2,759</u>	<u>\$ 2,180</u>

At December 31, 2024, deferred tax assets for U.S. state losses and credit carryforwards of \$75 million expire on or before the end of 2044 while the remaining \$16 million may be carried over indefinitely. Of these U.S. state deferred tax assets, \$55 million were reduced by valuation allowances. The deferred tax assets for U.S. federal losses and credit carryforwards of \$196 million primarily expire on or before the end of 2034. Of these U.S. federal deferred tax assets, \$192 million were reduced by valuation allowances. Deferred tax assets for losses and credit carryforwards of non-U.S. entities of \$278 million expire on or before the end of 2044 while the remaining \$781 million may be carried over indefinitely. Non-U.S. entities that have not demonstrated consistent and/or sustainable profitability to support the realization of net deferred tax assets, including certain entities in Luxembourg, have recorded valuation allowances of \$627 million against tax carryforwards and other deferred tax assets.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits for uncertain tax positions, including positions impacting only the timing of tax benefits, follows.

Reconciliation of unrecognized tax benefits: ¹

(Millions of dollars)	Years ended December 31,		
	2024	2023	2022
Beginning balance	\$ 1,223	\$ 1,140	\$ 1,886
Additions for tax positions related to current year	118	94	72
Additions for tax positions related to prior years	49	42	91
Reductions for tax positions related to prior years	(30)	(19)	(66)
Reductions for settlements ²	(60)	(27)	(840)
Reductions for expiration of statute of limitations	(11)	(7)	(3)
Ending balance	\$ 1,289	\$ 1,223	\$ 1,140
Amount that, if recognized, would impact the effective tax rate	\$ 1,137	\$ 997	\$ 874

¹ Foreign currency impacts are included within each line as applicable.

² Includes cash payment or other reduction of assets to settle liability.

We classify interest and penalties on income taxes as a component of the provision for income taxes. We recognized a net provision for interest and penalties of \$35 million, \$36 million and \$49 million during the years ended December 31, 2024, 2023 and 2022, respectively. The total amount of interest and penalties accrued was \$190 million and \$135 million as of December 31, 2024 and 2023, respectively.

On September 8, 2022, the company reached a settlement with the U.S. Internal Revenue Service (IRS) that resolves all issues for tax years 2007 through 2016, without any penalties. The company's settlement includes, among other issues, the resolution of disputed tax treatment of profits earned by Caterpillar SARL (CSARL) from certain parts transactions. We vigorously contested the IRS's application of the "substance-over-form" or "assignment-of-income" judicial doctrines and its proposed increases to tax and imposition of accuracy related penalties. The settlement does not include any increases to tax in the United States based on those judicial doctrines and does not include any penalties. The final tax assessed by the IRS for all issues under the settlement was \$490 million for the ten-year period. This amount was primarily paid in 2022 along with associated interest of \$250 million. The settlement was within the total amount of gross unrecognized tax benefits for uncertain tax positions and enables us to avoid the costs and burdens of further disputes with the IRS. As a result of the settlement, we recorded a tax benefit of \$41 million in 2022 to reflect changes in estimates of prior years' taxes and related interest, net of tax.

We are subject to the continuous examination of our U.S. federal income tax returns by the IRS, and tax years 2017 to 2019 are currently under examination. In our major non-U.S. jurisdictions including Australia, Brazil, China, Germany, India, Japan, Mexico, Switzerland, Singapore and the U.K., tax years are typically subject to examination for three to ten years. Due to the uncertainty related to the timing and potential outcome of audits, we cannot estimate the range of reasonably possible change in unrecognized tax benefits in the next 12 months.

7. Cat Financial financing activities
A. Wholesale inventory receivables

Wholesale inventory receivables are receivables of Cat Financial that arise when Cat Financial provides financing for a dealer's purchase of inventory and were \$1,750 million and \$1,632 million, at December 31, 2024 and 2023, respectively. We include these receivables in Receivables—trade and other and Long-term receivables—trade and other in Statement 3.

Contractual maturities of outstanding wholesale inventory receivables:

(Millions of dollars)

Amounts Due In	December 31, 2024		
	Wholesale Loans	Wholesale Leases	Total
2025	\$ 1,056	\$ 35	\$ 1,091
2026	275	22	297
2027	206	14	220
2028	48	9	57
2029	18	4	22
Thereafter	6	1	7
Total	1,609	85	1,694
Guaranteed residual value ¹	31	19	50
Unguaranteed residual value ¹	2	22	24
Less: Unearned income	(9)	(9)	(18)
Total	\$ 1,633	\$ 117	\$ 1,750

¹ For Wholesale loans, represents residual value on failed sale leasebacks.

Cat Financial's wholesale inventory receivables generally may be repaid or refinanced without penalty prior to contractual maturity.

Please refer to Note 18 for fair value information.

B. Finance receivables

Finance receivables are receivables of Cat Financial and are reported in Statement 3 net of an allowance for credit losses.

Contractual maturities of outstanding finance receivables:

(Millions of dollars)

Amounts Due In	December 31, 2024		
	Retail Loans	Retail Leases	Total
2025	\$ 7,422	\$ 2,375	\$ 9,797
2026	4,449	1,651	6,100
2027	3,084	981	4,065
2028	1,724	517	2,241
2029	607	220	827
Thereafter	144	64	208
Total	17,430	5,808	23,238
Guaranteed residual value ¹	6	384	390
Unguaranteed residual value ¹	2	551	553
Less: Unearned income	(505)	(647)	(1,152)
Total	\$ 16,933	\$ 6,096	\$ 23,029

¹ For Retail loans, represents residual value on failed sale leasebacks.

Cat Financial's finance receivables generally may be repaid or refinanced without penalty prior to contractual maturity.

Please refer to Note 18 for fair value information.

C. Allowance for credit losses

Portfolio segments

A portfolio segment is the level at which Cat Financial develops a systematic methodology for determining its allowance for credit losses. Cat Financial's portfolio segments and related methods for estimating expected credit losses are as follows:

Customer

Cat Financial provides loans and finance leases to end-user customers primarily for the purpose of financing new and used Caterpillar machinery, engines and equipment for commercial use. Cat Financial also provides financing for power generation facilities that, in most cases, incorporate Caterpillar products. The average original term of Cat Financial's customer finance receivable portfolio was approximately 51 months with an average remaining term of approximately 27 months as of December 31, 2024.

Cat Financial typically maintains a security interest in financed equipment and generally requires physical damage insurance coverage on the financed equipment, both of which provide Cat Financial with certain rights and protections. If Cat Financial's collection efforts fail to bring a defaulted account current, Cat Financial generally can repossess the financed equipment, after satisfying local legal requirements, and sell it within the Caterpillar dealer network or through third-party auctions.

Cat Financial estimates the allowance for credit losses related to its customer finance receivables based on loss forecast models utilizing probabilities of default and the estimated loss given default based on past loss experience adjusted for current conditions and reasonable and supportable forecasts capturing country and industry-specific economic factors.

During the year ended December 31, 2024, Cat Financial's forecasts reflected a continuation of the trend of historically low unemployment rates as well as low delinquencies within their portfolio. However, industry delinquencies show an increasing trend as the central bank actions aimed at reducing inflation have weakened global economic growth. The company believes the economic forecasts employed represent reasonable and supportable forecasts, followed by a reversion to long-term trends.

Dealer

Cat Financial provides financing to Caterpillar dealers in the form of wholesale financing plans and short-term working capital loans. Cat Financial's wholesale financing plans provide assistance to dealers by financing their mostly new Caterpillar equipment inventory and rental fleets on a secured and unsecured basis. In addition, Cat Financial provides a variety of secured and unsecured loans to Caterpillar dealers.

Cat Financial estimates the allowance for credit losses for dealer finance receivables based on historical loss rates with consideration of current economic conditions and reasonable and supportable forecasts.

In general, Cat Financial's Dealer portfolio segment has not historically experienced large increases or decreases in credit losses based on changes in economic conditions due to its close working relationships with the dealers and their financial strength. Therefore, Cat Financial made no adjustments to historical loss rates during the year ended December 31, 2024.

Classes of finance receivables

Cat Financial further evaluates portfolio segments by the class of finance receivables, which is defined as a level of information (below a portfolio segment) in which the finance receivables have the same initial measurement attribute and a similar method for assessing and monitoring credit risk. Cat Financial's classes, which align with management reporting for credit losses, are as follows:

- **North America** — Finance receivables originated in the United States and Canada.
- **EAME** — Finance receivables originated in Europe, Africa, the Middle East and Eurasia.
- **Asia/Pacific** — Finance receivables originated in Australia, New Zealand, China, Japan, Southeast Asia and India.
- **Mining** — Finance receivables related to large mining customers worldwide.
- **Latin America** — Finance receivables originated in Mexico and Central and South American countries.
- **Power** — Finance receivables originated worldwide related to Caterpillar electrical power generation, gas compression and co-generation systems and non-Caterpillar equipment that is powered by these systems.

Receivable balances, including accrued interest, are written off against the allowance for credit losses when, in the judgment of management, they are considered uncollectible (generally upon repossession of the collateral). Generally, the amount of the write-off is determined by comparing the fair value of the collateral, less cost to sell, to the amortized cost of the receivable. Subsequent recoveries, if any, are credited to the allowance for credit losses when received.

An analysis of the allowance for credit losses was as follows:

(Millions of dollars)	December 31, 2024			December 31, 2023		
	Customer	Dealer	Total	Customer	Dealer	Total
Allowance for Credit Losses:						
Beginning balance	\$ 276	\$ 51	\$ 327	\$ 277	\$ 65	\$ 342
Write-offs	(125)	(47)	(172)	(115)	—	(115)
Recoveries	57	—	57	50	—	50
Provision for credit losses ¹	84	—	84	61	(14)	47
Other	(34)	—	(34)	3	—	3
Ending balance	\$ 258	\$ 4	\$ 262	\$ 276	\$ 51	\$ 327
Finance Receivables	\$ 21,517	\$ 1,512	\$ 23,029	\$ 20,571	\$ 1,878	\$ 22,449

¹ Excludes provision for credit losses on unfunded commitments and other miscellaneous receivables.

Gross write-offs by origination year for the Customer portfolio segment were as follows:

(Millions of dollars)	Year Ended December 31, 2024							
	2024	2023	2022	2021	2020	Prior	Revolving Finance Receivables	Total
North America	\$ 2	\$ 19	\$ 13	\$ 6	\$ 3	\$ 1	\$ 9	\$ 53
EAME	1	4	5	4	2	1	—	17
Asia/Pacific	1	4	5	4	1	1	—	16
Mining	8	3	3	—	—	—	—	14
Latin America	—	3	6	5	3	8	—	25
Total	<u>\$ 12</u>	<u>\$ 33</u>	<u>\$ 32</u>	<u>\$ 19</u>	<u>\$ 9</u>	<u>\$ 11</u>	<u>\$ 9</u>	<u>\$ 125</u>
	Year Ended December 31, 2023							
	2023	2022	2021	2020	2019	Prior	Revolving Finance Receivables	Total
North America	\$ 2	\$ 11	\$ 11	\$ 5	\$ 3	\$ 2	\$ 12	\$ 46
EAME	1	5	6	4	1	—	—	17
Asia/Pacific	2	5	8	5	1	—	—	21
Latin America	—	8	5	6	1	10	—	30
Power	—	—	—	—	—	1	—	1
Total	<u>\$ 5</u>	<u>\$ 29</u>	<u>\$ 30</u>	<u>\$ 20</u>	<u>\$ 6</u>	<u>\$ 13</u>	<u>\$ 12</u>	<u>\$ 115</u>

All \$47 million of gross write-offs in the Dealer portfolio segment for the year ended December 31, 2024 were in Latin America and originated prior to 2019.

Credit quality of finance receivables

At origination, Cat Financial evaluates credit risk based on a variety of credit quality factors including prior payment experience, customer financial information, credit ratings, loan-to-value ratios, probabilities of default, industry trends, macroeconomic factors and other internal metrics. On an ongoing basis, Cat Financial monitors credit quality based on past-due status as there is a meaningful correlation between the past-due status of customers and the risk of loss. In determining past-due status, Cat Financial considers the entire finance receivable past due when any installment is over 30 days past due.

Customer

The tables below summarize the aging category of Cat Financial's amortized cost of finance receivables in the Customer portfolio segment by origination year:

(Millions of dollars)	December 31, 2024							
	2024	2023	2022	2021	2020	Prior	Revolving Finance Receivables	Total Finance Receivables
North America								
Current	\$ 5,340	\$ 3,035	\$ 1,567	\$ 980	\$ 244	\$ 23	\$ 385	\$ 11,574
31-60 days past due	30	42	29	18	5	1	3	128
61-90 days past due	9	14	10	6	2	1	1	43
91+ days past due	13	37	26	16	6	2	1	101
EAME								
Current	1,235	874	532	285	92	72	—	3,090
31-60 days past due	7	10	4	3	1	—	—	25
61-90 days past due	3	4	1	1	1	—	—	10
91+ days past due	3	14	8	6	4	1	—	36
Asia/Pacific								
Current	898	531	256	87	14	2	—	1,788
31-60 days past due	4	6	5	2	—	—	—	17
61-90 days past due	1	1	2	1	—	—	—	5
91+ days past due	4	1	2	1	1	—	—	9
Mining								
Current	924	755	444	206	67	34	21	2,451
31-60 days past due	—	1	—	—	—	—	—	1
61-90 days past due	—	1	—	—	—	—	—	1
91+ days past due	4	5	5	1	—	3	—	18
Latin America								
Current	800	363	220	60	8	2	—	1,453
31-60 days past due	4	6	5	1	—	2	—	18
61-90 days past due	1	2	1	—	—	—	—	4
91+ days past due	2	6	8	4	1	1	—	22
Power								
Current	169	184	39	43	64	56	166	721
31-60 days past due	—	—	—	—	—	—	—	—
61-90 days past due	—	—	—	—	—	—	—	—
91+ days past due	—	—	—	—	—	2	—	2
Totals by Aging Category								
Current	9,366	5,742	3,058	1,661	489	189	572	21,077
31-60 days past due	45	65	43	24	6	3	3	189
61-90 days past due	14	22	14	8	3	1	1	63
91+ days past due	26	63	49	28	12	9	1	188
Total Customer	\$ 9,451	\$ 5,892	\$ 3,164	\$ 1,721	\$ 510	\$ 202	\$ 577	\$ 21,517

(Millions of dollars)	December 31, 2023							
	2023	2022	2021	2020	2019	Prior	Revolving Finance Receivables	Total Finance Receivables
<u>North America</u>								
Current	\$ 4,430	\$ 2,628	\$ 2,000	\$ 745	\$ 220	\$ 32	\$ 312	\$ 10,367
31-60 days past due	28	31	24	14	7	1	4	109
61-90 days past due	10	11	8	4	1	—	2	36
91+ days past due	12	23	18	9	4	1	2	69
<u>EAME</u>								
Current	1,336	895	588	258	111	105	—	3,293
31-60 days past due	10	9	7	3	1	—	—	30
61-90 days past due	4	3	3	1	1	—	—	12
91+ days past due	7	17	15	8	3	1	—	51
<u>Asia/Pacific</u>								
Current	943	594	293	73	16	4	—	1,923
31-60 days past due	5	6	7	2	—	—	—	20
61-90 days past due	2	3	3	2	—	—	—	10
91+ days past due	1	5	3	3	1	—	—	13
<u>Mining</u>								
Current	1,039	686	381	121	68	27	66	2,388
31-60 days past due	—	—	—	—	—	—	—	—
61-90 days past due	—	—	—	—	1	1	—	2
91+ days past due	—	—	1	—	—	1	—	2
<u>Latin America</u>								
Current	750	520	219	59	23	6	—	1,577
31-60 days past due	9	10	6	1	—	—	—	26
61-90 days past due	2	4	1	—	—	—	—	7
91+ days past due	2	10	8	5	8	11	—	44
<u>Power</u>								
Current	152	49	64	75	28	59	162	589
31-60 days past due	—	—	—	—	—	—	—	—
61-90 days past due	—	—	—	—	—	—	—	—
91+ days past due	—	—	—	—	—	3	—	3
<u>Totals by Aging Category</u>								
Current	8,650	5,372	3,545	1,331	466	233	540	20,137
31-60 days past due	52	56	44	20	8	1	4	185
61-90 days past due	18	21	15	7	3	1	2	67
91+ days past due	22	55	45	25	16	17	2	182
Total Customer	\$ 8,742	\$ 5,504	\$ 3,649	\$ 1,383	\$ 493	\$ 252	\$ 548	\$ 20,571

Finance receivables in the Customer portfolio segment are substantially secured by collateral, primarily in the form of Caterpillar and other equipment. For those contracts where the borrower is experiencing financial difficulty, repayment of the outstanding amounts is generally expected to be provided through the operation or repossession and sale of the equipment.

Dealer

As of December 31, 2024, Cat Financial's total amortized cost of finance receivables within the Dealer portfolio segment was current. As of December 31, 2023, Cat Financial's total amortized cost of finance receivables within the Dealer portfolio segment was current, with the exception of \$44 million that was 91+ days past due in Latin America, all of which originated prior to 2019.

Non-accrual finance receivables

In Cat Financial's Customer portfolio segment, finance receivables which were on non-accrual status and finance receivables over 90 days past due and still accruing income were as follows:

(Millions of dollars)	December 31, 2024		December 31, 2023	
	Amortized Cost		Amortized Cost	
	Non-accrual With an Allowance	91+ Still Accruing	Non-accrual With an Allowance	91+ Still Accruing
North America	\$ 83	\$ 20	\$ 52	\$ 20
EAME	33	5	34	18
Asia/Pacific	5	5	8	5
Mining	29	—	2	—
Latin America	24	—	48	1
Power	2	—	8	—
Total	\$ 176	\$ 30	\$ 152	\$ 44

There were no finance receivables in Cat Financial's Dealer portfolio segment on non-accrual status as of December 31, 2024. There were \$44 million in finance receivables in Cat Financial's Dealer portfolio segment on non-accrual status as of December 31, 2023, all of which was in Latin America.

Modifications

Cat Financial periodically modifies the terms of their finance receivable agreements in response to borrowers' financial difficulty. Typically, the types of modifications granted are payment deferrals, interest-only payment periods and/or term extensions. Many modifications Cat Financial grants are for commercial reasons or for borrowers experiencing some form of short-term financial stress and may result in insignificant payment delays. Cat Financial does not consider these borrowers to be experiencing financial difficulty. Modifications for borrowers Cat Financial does consider to be experiencing financial difficulty typically result in payment deferrals and/or reduced payments for a period of four months or longer, term extension of six months or longer or a combination of both.

During the years ended December 31, 2024 and 2023, there were no finance receivable modifications granted to borrowers experiencing financial difficulty in Cat Financial's Dealer portfolio segment. The amortized cost basis of finance receivables modified for borrowers experiencing financial difficulty in Cat Financial's Customer portfolio segment during the years ended December 31, 2024 and 2023, was \$33 million and \$47 million, respectively. Total modifications with borrowers experiencing financial difficulty represented 0.15 percent and 0.21 percent of Cat Financial's Customer portfolio for the same periods, respectively.

The financial effects of term extensions and payment delays for borrowers experiencing financial difficulty for the years ended December 31, were as follows:

(In months)	2024	2023
Weighted average extension to term of modified contracts	8	15
Weighted average payment deferral and/or interest only periods	6	7

After Cat Financial modifies a finance receivable, they continue to track its performance under its most recent modified terms. As of December 31, 2024 and 2023, defaults of loans modified in the prior twelve months were not significant.

The effect of most modifications made to finance receivables for borrowers experiencing financial difficulty is already included in the allowance for credit losses based on the methodologies used to estimate the allowance; therefore, a change to the allowance for credit losses is generally not recorded upon modification. On rare occasions when principal forgiveness is provided, the amount forgiven is written off against the allowance for credit losses.

D. Concentration of Credit Risk

Finance receivables and wholesale inventory receivables primarily represent receivables under installment sales contracts, receivables arising from leasing transactions and notes receivable. No single customer or dealer represented a significant concentration of credit risk.

8. Inventories

Inventories (principally using the LIFO method) are comprised of the following:

(Millions of dollars)	December 31,	
	2024	2023
Raw materials	\$ 6,681	\$ 6,492
Work-in-process	1,438	1,411
Finished goods	8,329	8,308
Supplies	379	354
Total inventories	<u>\$ 16,827</u>	<u>\$ 16,565</u>

9. Property, plant and equipment

(Millions of dollars)	Useful Lives (Years)	December 31,	
		2024	2023
Land	—	\$ 612	\$ 616
Buildings and land improvements	20-45	7,281	7,154
Machinery, equipment and other	2-10	12,523	12,150
Software	3-7	1,609	1,607
Equipment leased to others	1-7	5,701	5,837
Construction-in-process	—	1,751	1,259
Total property, plant and equipment, at cost		<u>29,477</u>	<u>28,623</u>
Less: Accumulated depreciation		<u>(16,116)</u>	<u>(15,943)</u>
Property, plant and equipment—net		<u>\$ 13,361</u>	<u>\$ 12,680</u>

10. Intangible assets and goodwill

A. Intangible assets

Intangible assets were comprised of the following:

(Millions of dollars)	December 31, 2024		
	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	\$ 2,220	\$ (1,950)	\$ 270
Intellectual property	496	(401)	95
Other	117	(83)	34
Total finite-lived intangible assets	<u>\$ 2,833</u>	<u>\$ (2,434)</u>	<u>\$ 399</u>

(Millions of dollars)	December 31, 2023		
	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	\$ 2,232	\$ (1,814)	\$ 418
Intellectual property	484	(380)	104
Other	117	(75)	42
Total finite-lived intangible assets	<u>\$ 2,833</u>	<u>\$ (2,269)</u>	<u>\$ 564</u>

Finite-lived intangible assets are amortized over their estimated useful lives and tested for impairment if events or changes in circumstances indicate that the asset may be impaired.

Amortization expense related to intangible assets was \$176 million, \$218 million and \$284 million for 2024, 2023 and 2022, respectively.

As of December 31, 2024, amortization expense related to intangible assets is expected to be:

(Millions of dollars)					
2025	2026	2027	2028	2029	Thereafter
\$166	\$96	\$33	\$26	\$23	\$55

B. Goodwill

There were no goodwill impairments during 2024 or 2023.

Our annual impairment tests completed in the fourth quarter of 2022 indicated the fair value of each reporting unit was substantially above its respective carrying value, including goodwill, with the exception of our Rail reporting unit.

The Rail reporting unit is a part of our Energy & Transportation segment. Rail's product portfolio includes diesel-electric locomotives and other rail-related products and services. The annual impairment test completed in the fourth quarter of 2022 indicated that the fair value of Rail was below its carrying value. Accordingly, we recognized a goodwill impairment charge of \$925 million, resulting in a full impairment of Rail's goodwill balance as of October 1, 2022. There was a \$36 million tax benefit associated with this impairment charge. The valuation of the Rail reporting unit was based on estimates of future cash flows, which assumed a reduced demand forecast, lower margins due to continued inflationary cost pressures, and a discount rate approximately 140 basis points higher than utilized in the prior year valuation. The reduction in the demand forecast in the fourth quarter of 2022 was primarily driven by fourth quarter commercial developments, resulting in a lower outlook for the Company's locomotive offerings.

The changes in carrying amount of goodwill by reportable segment for the years ended December 31, 2024 and 2023 were as follows:

(Millions of dollars)	December 31, 2023	Other Adjustments ¹	December 31, 2024
Construction Industries			
Goodwill	\$ 277	\$ (16)	\$ 261
Impairments	(22)	—	(22)
Net goodwill	255	(16)	239
Resource Industries			
Goodwill	4,151	(27)	4,124
Impairments	(1,175)	—	(1,175)
Net goodwill	2,976	(27)	2,949
Energy & Transportation			
Goodwill	2,959	(20)	2,939
Impairment	(925)	—	(925)
Net goodwill	2,034	(20)	2,014
All Other ²			
Goodwill	43	(4)	39
Consolidated total			
Goodwill	7,430	(67)	7,363
Impairments	(2,122)	—	(2,122)
Net goodwill	\$ 5,308	\$ (67)	\$ 5,241
	December 31, 2022	Other Adjustments ¹	December 31, 2023
Construction Industries			
Goodwill	\$ 287	\$ (10)	\$ 277
Impairments	(22)	—	(22)
Net goodwill	265	(10)	255
Resource Industries			
Goodwill	4,130	21	4,151
Impairments	(1,175)	—	(1,175)
Net goodwill	2,955	21	2,976
Energy & Transportation			
Goodwill	2,947	12	2,959
Impairment	(925)	—	(925)
Net goodwill	2,022	12	2,034
All Other ²			
Goodwill	46	(3)	43
Consolidated total			
Goodwill	7,410	20	7,430
Impairments	(2,122)	—	(2,122)
Net goodwill	\$ 5,288	\$ 20	\$ 5,308

¹ Other adjustments are comprised primarily of foreign currency translation.

² Includes All Other Segment (See Note 23).

11. Investments in debt and equity securities

We have investments in certain debt and equity securities, which we record at fair value and primarily include in Other assets in Statement 3. Short-term and long-term investments are held with high quality institutions and, by policy, the amount of credit exposure to any one institution is limited.

We classify debt securities primarily as available-for-sale. We include the unrealized gains and losses arising from the revaluation of available-for-sale debt securities, net of applicable deferred income taxes, in equity (AOCI in Statement 3). We include the unrealized gains and losses arising from the revaluation of the equity securities in Other income (expense) in Statement 1. We generally determine realized gains and losses on sales of investments using the specific identification method for available-for-sale debt and equity securities and include them in Other income (expense) in Statement 1.

The cost basis and fair value of available-for-sale debt securities with unrealized gains and losses included in equity (AOCI in Statement 3) were as follows:

Available-for-sale debt securities (Millions of dollars)	December 31, 2024			December 31, 2023		
	Cost Basis	Unrealized Pretax Net Gains (Losses)	Fair Value	Cost Basis	Unrealized Pretax Net Gains (Losses)	Fair Value
Government debt securities						
U.S. treasury bonds	\$ 10	\$ —	\$ 10	\$ 10	\$ —	\$ 10
Other U.S. and non-U.S. government bonds	71	(3)	68	62	(2)	60
Corporate debt securities						
Corporate bonds and other debt securities	3,199	(29)	3,170	3,031	(36)	2,995
Asset-backed securities	220	(1)	219	195	(3)	192
Mortgage-backed debt securities						
U.S. governmental agency	476	(33)	443	433	(23)	410
Residential	2	—	2	3	(1)	2
Commercial	136	(6)	130	137	(9)	128
Total available-for-sale debt securities	<u>\$ 4,114</u>	<u>\$ (72)</u>	<u>\$ 4,042</u>	<u>\$ 3,871</u>	<u>\$ (74)</u>	<u>\$ 3,797</u>

Available-for-sale debt securities in an unrealized loss position:

(Millions of dollars)	December 31, 2024					
	Less than 12 months ¹		12 months or more ¹		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Government debt securities						
Other U.S. and non-U.S. government bonds	\$ —	\$ —	\$ 55	\$ 4	\$ 55	\$ 4
Corporate debt securities						
Corporate bonds	729	3	812	33	1,541	36
Asset-backed securities	7	—	37	2	44	2
Mortgage-backed debt securities						
U.S. governmental agency	126	3	273	30	399	33
Commercial	13	—	113	6	126	6
Total	\$ 875	\$ 6	\$ 1,290	\$ 75	\$ 2,165	\$ 81

(Millions of dollars)	December 31, 2023					
	Less than 12 months ¹		12 months or more ¹		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Government debt securities						
Other U.S. and non-U.S. government bonds	\$ —	\$ —	\$ 25	\$ 3	\$ 25	\$ 3
Corporate debt securities						
Corporate bonds	765	—	1,011	45	1,776	45
Asset-backed securities	9	—	97	3	106	3
Mortgage-backed debt securities						
U.S. governmental agency	33	—	287	25	320	25
Commercial	2	—	121	9	123	9
Total	\$ 809	\$ —	\$ 1,541	\$ 85	\$ 2,350	\$ 85

¹ Indicates the length of time that individual securities have been in a continuous unrealized loss position.

The unrealized losses on our investments in government debt securities, corporate debt securities, and mortgage-backed debt securities relate to changes in underlying interest rates and credit spreads since time of purchase. We do not intend to sell the investments, and it is not likely that we will be required to sell the investments before recovery of their respective amortized cost basis. In addition, we did not expect credit-related losses on these investments as of December 31, 2024.

The cost basis and fair value of available-for-sale debt securities at December 31, 2024, by contractual maturity, are shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to prepay and creditors may have the right to call obligations.

(Millions of dollars)	December 31, 2024	
	Cost Basis	Fair Value
Due in one year or less	\$ 1,274	\$ 1,270
Due after one year through five years	1,820	1,794
Due after five years through ten years	304	301
Due after ten years	102	102
U.S. governmental agency mortgage-backed securities	476	443
Residential mortgage-backed securities	2	2
Commercial mortgage-backed securities	136	130
Total debt securities – available-for-sale	\$ 4,114	\$ 4,042

Sales of available-for-sale debt securities:

(Millions of dollars)	Years Ended December 31,		
	2024	2023	2022
Proceeds from the sale of available-for-sale securities	\$ 1,223	\$ 940	\$ 767
Gross gains from the sale of available-for-sale securities	\$ 1	\$ —	\$ —
Gross losses from the sale of available-for-sale securities	\$ 5	\$ 1	\$ 5

In addition, we had \$1,900 million of investments in time deposits classified as held-to-maturity debt securities as of December 31, 2023. We did not have any investments classified as held-to-maturity debt securities as of December 31, 2024. These investments matured within one year and were included in Prepaid expenses and other current assets in Statement 3. We record held-to-maturity debt securities at amortized cost, which approximates fair value.

For the years ended December 31, 2024 and 2023, the net unrealized gains (losses) for equity securities held at December 31, 2024 and 2023 were \$25 million and \$(12) million, respectively.

12. Postemployment benefit plans

We provide defined benefit pension plans, defined contribution plans and/or other postretirement benefit plans (retirement health care and life insurance) to employees in many of our locations throughout the world. Our defined benefit pension plans provide a benefit based on years of service and/or the employee's average earnings near retirement. Our defined contribution plans allow employees to contribute a portion of their salary to help save for retirement, and in most cases, we provide a matching contribution. The benefit obligation related to our non-U.S. defined benefit pension plans are for employees located primarily in Europe, Japan and Brazil. For other postretirement benefits (OPEB), substantially all of our benefit obligation is for employees located in the United States.

A. Obligations, assets and funded status

(Millions of dollars)	U.S. Pension Benefits		Non-U.S. Pension Benefits		Other Postretirement Benefits	
	2024	2023	2024	2023	2024	2023
Accumulated benefit obligation, end of year	\$ 12,171	\$ 13,137	\$ 2,880	\$ 3,151		
Change in benefit obligation:						
Benefit obligation, beginning of year	\$ 13,137	\$ 13,069	\$ 3,265	\$ 2,956	\$ 2,741	\$ 2,866
Service cost ¹	—	—	43	40	67	67
Interest cost	625	656	118	124	131	144
Plan amendments	—	—	—	—	—	—
Actuarial loss (gain)	(603)	394	(31)	169	(202)	(115)
Foreign currency exchange rates	—	—	(203)	178	(33)	14
Participant contributions	—	—	5	5	45	43
Benefits paid - gross	(988)	(982)	(193)	(196)	(286)	(285)
Less: federal subsidy on benefits paid	—	—	—	—	6	7
Curtailments, settlements and termination benefits	—	—	(15)	(2)	—	—
Acquisitions, divestitures and other	—	—	—	(9)	—	—
Benefit obligation, end of year	<u>\$ 12,171</u>	<u>\$ 13,137</u>	<u>\$ 2,989</u>	<u>\$ 3,265</u>	<u>\$ 2,469</u>	<u>\$ 2,741</u>
Change in plan assets:						
Fair value of plan assets, beginning of year	\$ 12,738	\$ 12,456	\$ 3,467	\$ 3,244	\$ 144	\$ 102
Actual return on plan assets	96	1,220	74	160	25	33
Foreign currency exchange rates	—	—	(194)	190	—	—
Company contributions	52	44	59	66	160	251
Participant contributions	—	—	5	5	45	43
Benefits paid	(988)	(982)	(193)	(196)	(286)	(285)
Settlements and termination benefits	—	—	(15)	(2)	—	—
Fair value of plan assets, end of year	<u>\$ 11,898</u>	<u>\$ 12,738</u>	<u>\$ 3,203</u>	<u>\$ 3,467</u>	<u>\$ 88</u>	<u>\$ 144</u>
Over (under) funded status	<u>\$ (273)</u>	<u>\$ (399)</u>	<u>\$ 214</u>	<u>\$ 202</u>	<u>\$ (2,381)</u>	<u>\$ (2,597)</u>
Amounts recognized in Statement 3:						
Other assets (non-current asset)	\$ 354	\$ 354	\$ 541	\$ 563	\$ —	\$ —
Accrued wages, salaries and employee benefits (current liability)	(50)	(52)	(21)	(20)	(204)	(162)
Liability for postemployment benefits (non-current liability) ²	(577)	(701)	(306)	(341)	(2,177)	(2,435)
Net (liability) asset recognized	<u>\$ (273)</u>	<u>\$ (399)</u>	<u>\$ 214</u>	<u>\$ 202</u>	<u>\$ (2,381)</u>	<u>\$ (2,597)</u>
Amounts recognized in AOCI (pre-tax):						
Prior service cost (credit)	\$ —	\$ —	\$ 21	\$ 21	\$ (5)	\$ (19)
Weighted-average assumptions used to determine benefit obligation, end of year:						
Discount rate	5.6 %	5.0 %	4.1 %	3.9 %	5.6 %	5.1 %
Rate of compensation increase ¹	— %	— %	2.2 %	2.3 %	4.0 %	4.0 %

¹ All U.S. pension benefits are frozen, and accordingly there is no longer any service cost and certain assumptions are no longer applicable.

² The Liability for postemployment benefits reported in Statement 3 includes liabilities for other postemployment benefits and non-qualified deferred compensation plans. For 2024 and 2023, these liabilities were \$697 million and \$621 million, respectively.

For 2024, Actuarial loss (gain) impacting the benefit obligation was primarily due to higher discount rates at the end of 2024 compared to the end of 2023. For 2023, Actuarial loss (gain) impacting the benefit obligation was primarily due to lower discount rates at the end of 2023 compared to the end of 2022.

(Millions of dollars)	U.S. Pension Benefits		Non-U.S. Pension Benefits	
	2024	2023	2024	2023
Pension plans with projected benefit obligation in excess of plan assets:				
Projected benefit obligation	\$ 627	\$ 10,557	\$ 370	\$ 623
Fair value of plan assets	\$ —	\$ 9,805	\$ 43	\$ 262
Pension plans with accumulated benefit obligation in excess of plan assets:				
Accumulated benefit obligation	\$ 627	\$ 10,557	\$ 279	\$ 534
Fair value of plan assets	\$ —	\$ 9,805	\$ 7	\$ 224

The accumulated postretirement benefit obligation exceeds plan assets for all of our other postretirement benefit plans for all years presented.

B. Net periodic benefit cost

(Millions of dollars)	U.S. Pension Benefits			Non-U.S. Pension Benefits			Other Postretirement Benefits		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
Net periodic benefit cost:									
Service cost ¹	\$ —	\$ —	\$ —	\$ 43	\$ 40	\$ 50	\$ 67	\$ 67	\$ 99
Interest cost	625	656	401	118	124	69	131	144	80
Expected return on plan assets	(699)	(689)	(669)	(165)	(163)	(130)	(7)	(11)	(12)
Curtailments, settlements and termination benefits	—	—	—	—	1	1	—	—	—
Amortization of prior service cost (credit)	—	—	—	—	—	—	(14)	(12)	(6)
Actuarial loss (gain) ²	—	(138)	259	59	172	(132)	(213)	(131)	(733)
Net periodic benefit cost (benefit) ³	\$ (74)	\$ (171)	\$ (9)	\$ 55	\$ 174	\$ (142)	\$ (36)	\$ 57	\$ (572)
Amounts recognized in other comprehensive income (pre-tax):									
Current year prior service cost (credit)	\$ —	\$ —	\$ —	\$ —	\$ 1	\$ (3)	\$ —	\$ (2)	\$ (30)
Amortization of prior service (cost) credit	—	—	—	—	—	—	14	12	6
Total recognized in other comprehensive income	—	—	—	—	1	(3)	14	10	(24)
Total recognized in net periodic cost and other comprehensive income	\$ (74)	\$ (171)	\$ (9)	\$ 55	\$ 175	\$ (145)	\$ (22)	\$ 67	\$ (596)
Weighted-average assumptions used to determine net periodic benefit cost:									
Discount rate used to measure service cost ¹	— %	— %	— %	3.6 %	3.8 %	1.7 %	5.1 %	5.4 %	2.8 %
Discount rate used to measure interest cost	5.0 %	5.2 %	2.3 %	3.9 %	4.2 %	1.7 %	5.0 %	5.3 %	2.2 %
Expected rate of return on plan assets	5.7 %	5.8 %	4.0 %	5.1 %	5.2 %	3.1 %	7.4 %	7.4 %	6.9 %
Rate of compensation increase ¹	— %	— %	— %	2.3 %	2.3 %	2.0 %	4.0 %	4.0 %	4.0 %

¹ All U.S. pension benefits are frozen, and accordingly there is no longer any service cost and certain assumptions are no longer applicable.

² Actuarial loss (gain) represents the effects of actual results differing from our assumptions and the effects of changing assumptions. We recognize actuarial loss (gain) immediately through earnings upon the annual remeasurement in the fourth quarter, or on an interim basis as triggering events warrant remeasurement.

³ The service cost component is included in Operating costs and all other components are included in Other income (expense) in Statement 1.

Our expected long-term rate of return on U.S. plan assets is based on our estimate of long-term returns for equities and fixed income securities weighted by the fair value of plan asset allocations as of December 31. We use a similar process to determine this rate for our non-U.S. plans.

The assumed health care trend rate represents the rate at which health care costs are assumed to increase. We assumed a weighted-average increase of 6.2 percent in our calculation of 2024 benefit expense. We expect a weighted-average increase of 6.0 percent during 2025. The 2025 rates are assumed to decrease gradually to the ultimate health care trend rate of 4.7 percent in 2030.

C. Expected contributions and Benefit payments

The following table presents information about expected contributions and benefit payments for pension and other postretirement benefit plans:

(Millions of dollars)	2025						
Expected employer contributions:							
U.S. Pension Benefits	\$	49					
Non-U.S. Pension Benefits	\$	53					
Other Postretirement Benefits	\$	252					
Expected benefit payments:	2025	2026	2027	2028	2029	2030-2034	Total
U.S. Pension Benefits	\$ 1,000	\$ 995	\$ 985	\$ 980	\$ 970	\$ 4,640	\$ 9,570
Non-U.S. Pension Benefits	\$ 185	\$ 180	\$ 185	\$ 195	\$ 200	\$ 1,030	\$ 1,975
Other Postretirement Benefits	\$ 235	\$ 230	\$ 230	\$ 230	\$ 225	\$ 1,080	\$ 2,230
Expected Medicare Part D subsidy:	\$ 6	\$ 6	\$ 5	\$ 5	\$ 5	\$ 19	\$ 46

The above table reflects the total expected employer contributions and expected benefits to be paid from the plan or from company assets and does not include the participants' share of the cost. The expected benefit payments for our other postretirement benefits include payments for prescription drug benefits. The above table also includes Medicare Part D subsidy amounts expected to be received by the company which will offset other postretirement benefit payments.

D. Plan assets

In general, our strategy for both the U.S. and non-U.S. pensions is designed to decrease funded status volatility through ongoing alignment of the interest rate sensitivity of our investments to our obligations, while reducing risk from return seeking assets in our portfolio. The current U.S. pension target asset allocation is 85 percent fixed income and 15 percent equities. We will revise this target allocation periodically to ensure it reflects our overall objectives. The non-U.S. pension weighted-average target allocations are 59 percent fixed income, 19 percent insurance contracts, 11 percent equities, 6 percent real estate, and 5 percent other. The target allocations for each plan vary based upon local statutory requirements, demographics of plan participants and funded status. We primarily invest the non-U.S. plan assets in non-U.S. securities.

Our target allocation for the other postretirement benefit plans is 40 percent equities and 60 percent fixed income.

We rebalance the U.S. plans to within the appropriate target asset allocation ranges on a monthly basis. The frequency of rebalancing for the non-U.S. plans varies depending on the plan. As a result of our diversification strategies, there are no significant concentrations of risk within the portfolio of investments.

We permit the use of certain derivative instruments where appropriate and necessary for achieving overall investment policy objectives. The plans do not use derivative contracts for speculative purposes.

The accounting guidance on fair value measurements specifies a fair value hierarchy based upon the observability of inputs used in valuation techniques (Level 1, 2 and 3). Certain assets that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. See Note 18 for a discussion of the fair value hierarchy.

We determine fair values as follows:

- Equity securities are primarily based on valuations for identical instruments in active markets.

- Fixed income securities are primarily based upon models that take into consideration such market-based factors as recent sales, risk-free yield curves and prices of similarly rated bonds.
- Real estate is stated at the fund's net asset value or at appraised value.
- Insurance contracts are valued on an insurer pricing basis updated for changes in insurance market pricing, market rates, and inflation.
- Cash, short-term instruments and other are based on the carrying amount, which approximates fair value, or the fund's net asset value.

The fair value of the pension and other postretirement benefit plan assets by category is summarized below:

(Millions of dollars)	December 31, 2024				
	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
U.S. Pension					
Equity securities:					
U.S. equities	\$ 1,087	\$ —	\$ 28	\$ 62	\$ 1,177
Non-U.S. equities	946	—	10	—	956
Fixed income securities:					
U.S. corporate bonds	—	5,396	33	36	5,465
Non-U.S. corporate bonds	—	972	—	—	972
U.S. government bonds	—	2,656	—	—	2,656
U.S. governmental agency mortgage-backed securities	—	180	—	—	180
Non-U.S. government bonds	—	132	—	—	132
Cash, short-term instruments and other	48	12	—	300	360
Total U.S. pension assets	<u>\$ 2,081</u>	<u>\$ 9,348</u>	<u>\$ 71</u>	<u>\$ 398</u>	<u>\$ 11,898</u>
December 31, 2023					
(Millions of dollars)	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
U.S. Pension					
Equity securities:					
U.S. equities	\$ 1,107	\$ 10	\$ 24	\$ 81	\$ 1,222
Non-U.S. equities	910	—	3	—	913
Fixed income securities:					
U.S. corporate bonds	—	5,706	33	33	5,772
Non-U.S. corporate bonds	—	1,228	—	—	1,228
U.S. government bonds	—	2,988	—	—	2,988
U.S. governmental agency mortgage-backed securities	—	84	—	—	84
Non-U.S. government bonds	—	100	—	—	100
Real estate	—	—	3	—	3
Cash, short-term instruments and other	99	33	—	296	428
Total U.S. pension assets	<u>\$ 2,116</u>	<u>\$ 10,149</u>	<u>\$ 63</u>	<u>\$ 410</u>	<u>\$ 12,738</u>

(Millions of dollars)	December 31, 2024				
	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
Non-U.S. Pension					
Equity securities:					
U.S. equities	\$ 74	\$ —	\$ —	\$ —	\$ 74
Non-U.S. equities	197	26	—	20	243
Global equities ¹	32	—	—	17	49
Fixed income securities:					
U.S. corporate bonds	—	87	—	—	87
Non-U.S. corporate bonds	—	468	—	—	468
U.S. government bonds	—	61	—	—	61
Non-U.S. government bonds	—	916	—	—	916
Global fixed income ¹	—	104	—	193	297
Real estate	—	207	—	9	216
Insurance contracts	—	—	601	—	601
Cash, short-term instruments and other ²	35	156	—	—	191
Total non-U.S. pension assets	<u>\$ 338</u>	<u>\$ 2,025</u>	<u>\$ 601</u>	<u>\$ 239</u>	<u>\$ 3,203</u>
December 31, 2023					
(Millions of dollars)	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
Non-U.S. Pension					
Equity securities:					
U.S. equities	\$ 73	\$ —	\$ —	\$ —	\$ 73
Non-U.S. equities	228	33	—	21	282
Global equities ¹	28	—	—	20	48
Fixed income securities:					
U.S. corporate bonds	—	91	—	—	91
Non-U.S. corporate bonds	—	466	—	—	466
U.S. government bonds	—	63	—	—	63
Non-U.S. government bonds	—	998	—	—	998
Global fixed income ¹	—	91	—	216	307
Real estate	—	210	—	9	219
Insurance contracts	—	—	675	—	675
Cash, short-term instruments and other ²	54	191	—	—	245
Total non-U.S. pension assets	<u>\$ 383</u>	<u>\$ 2,143</u>	<u>\$ 675</u>	<u>\$ 266</u>	<u>\$ 3,467</u>

¹ Includes funds that invest in both U.S. and non-U.S. securities.

² Includes funds that invest in multiple asset classes, hedge funds and other.

(Millions of dollars)	December 31, 2024				
	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
Other Postretirement Benefits					
Equity securities:					
U.S. equities	\$ 41	\$ —	\$ —	\$ 2	\$ 43
Non-U.S. equities	18	—	—	2	20
Fixed income securities:					
U.S. corporate bonds	—	—	—	20	20
Cash, short-term instruments and other	—	—	—	5	5
Total other postretirement benefit assets	<u>\$ 59</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 29</u>	<u>\$ 88</u>

(Millions of dollars)	December 31, 2023				
	Level 1	Level 2	Level 3	Measured at NAV	Total Assets at Fair Value
Other Postretirement Benefits					
Equity securities:					
U.S. equities	\$ 65	\$ —	\$ —	\$ 5	\$ 70
Non-U.S. equities	23	—	—	2	25
Fixed income securities:					
U.S. corporate bonds	—	—	—	30	30
Cash, short-term instruments and other	1	—	—	18	19
Total other postretirement benefit assets	<u>\$ 89</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 55</u>	<u>\$ 144</u>

The activity attributable to U.S. pension assets measured at fair value using Level 3 inputs for the years ended December 31, 2024 and 2023 was insignificant. The activity in our non-U.S. pension Level 3 assets involved insurance contracts. During 2024, activity was settlements of \$59 million and unrealized losses of \$15 million. During 2023, activity was purchases of \$633 million, settlements of \$9 million and unrealized gains of \$51 million. We valued these instruments using pricing models that, in management's judgment, reflect the assumptions a market participant would use.

E. Defined contribution plans

We have both U.S. and non-U.S. employee defined contribution plans to help employees save for retirement. Our primary U.S. 401(k) plan allows eligible employees to contribute a portion of their cash compensation to the plan. Employees are eligible for matching contributions equal to 100 percent of employee contributions to the plan up to 6 percent of cash compensation and an annual employer contribution that ranges from 3 to 5 percent of cash compensation (depending on years of service and age).

These 401(k) plans include various investment funds, including a non-leveraged employee stock ownership plan (ESOP). As of December 31, 2024 and 2023, the ESOP held 10.4 million and 11.3 million shares, respectively. We allocate all of the shares held by the ESOP to participant accounts. Dividends paid to participants are automatically reinvested into company shares unless the participant elects to have all or a portion of the dividend paid to the participant. Various other U.S. and non-U.S. defined contribution plans generally allow eligible employees to contribute a portion of their cash compensation to the plans, and in most cases, we provide a matching contribution to the funds.

Total company costs related to U.S. and non-U.S. defined contribution plans were as follows:

(Millions of dollars)	2024	2023	2022
U.S. plans ¹	\$ 610	\$ 567	\$ 392
Non-U.S. plans	131	114	114
	<u>\$ 741</u>	<u>\$ 681</u>	<u>\$ 506</u>

¹ Includes costs related to our non-qualified deferred compensation plans. We utilize total return swaps to economically hedge this exposure to offset the related costs. See Note 4 for additional information.

For our U.S. plans, changes in annual defined contribution costs are primarily due to fair value adjustments related to our non-qualified deferred compensation plans.

13. Short-term borrowings

(Millions of dollars)	December 31,	
	2024	2023
Machinery, Energy & Transportation:		
Notes payable to banks	\$ —	\$ —
	—	—
Financial Products:		
Commercial paper	3,946	4,069
Notes payable to banks	165	330
Demand notes	282	244
	<u>4,393</u>	<u>4,643</u>
Total short-term borrowings	<u>\$ 4,393</u>	<u>\$ 4,643</u>

The weighted-average interest rates on short-term borrowings outstanding were:

	December 31,	
	2024	2023
Commercial paper	4.5 %	5.2 %
Notes payable to banks	10.8 %	10.0 %
Demand notes	4.2 %	5.2 %

Please refer to Note 18 for fair value information on short-term borrowings.

14. Long-term debt

(Millions of dollars)	Effective Yield to Maturity ¹	December 31,	
		2024	2023
Machinery, Energy & Transportation:			
Notes—\$759 million of 5.200% due 2041 ²	5.27%	\$ 753	\$ 752
Debentures—\$193 million of 6.625% due 2028 ²	6.68%	193	193
Debentures—\$500 million of 2.600% due 2029 ²	2.67%	498	498
Debentures—\$800 million of 2.600% due 2030 ²	2.72%	796	795
Debentures—\$500 million of 1.900% due 2031 ²	2.04%	496	496
Debentures—\$242 million of 7.300% due 2031 ²	7.38%	241	241
Debentures—\$307 million of 5.300% due 2035 ²	8.64%	237	233
Debentures—\$460 million of 6.050% due 2036 ²	6.12%	457	456
Debentures—\$65 million of 8.250% due 2038 ²	8.38%	64	64
Debentures—\$160 million of 6.950% due 2042 ²	7.02%	158	158
Debentures—\$1,722 million of 3.803% due 2042 ²	6.39%	1,375	1,355
Debentures—\$500 million of 4.300% due 2044	4.39%	494	494
Debentures—\$1,000 million of 3.250% due 2049 ²	3.34%	984	984
Debentures—\$1,200 million of 3.250% due 2050 ²	3.32%	1,186	1,186
Debentures—\$500 million of 4.750% due 2064	4.81%	494	494
Debentures—\$246 million of 7.375% due 2097 ²	7.51%	241	241
Finance lease obligations & other ³		(103)	(61)
Total Machinery, Energy & Transportation		8,564	8,579
Financial Products:			
Medium-term notes		18,568	15,581
Other		219	312
Total Financial Products		18,787	15,893
Total long-term debt due after one year		\$ 27,351	\$ 24,472

¹ Effective yield to maturity includes the impact of discounts, premiums and debt issuance costs.

² Redeemable at our option in whole or in part at any time at a redemption price equal to the greater of (i) 100% of the principal amount or (ii) the discounted present value of the notes or debentures, calculated in accordance with the terms of such notes or debentures.

³ Includes \$(170) million and \$(133) million of mark-to-market adjustments related to fair value interest rate swap contracts as of December 31, 2024 and 2023, respectively.

All outstanding notes and debentures are unsecured and rank equally with one another.

Cat Financial's medium-term notes are offered by prospectus and are issued through agents at fixed and floating rates. Medium-term notes due after one year have a weighted average interest rate of 4.0% with remaining maturities up to 5 years at December 31, 2024.

The aggregate amounts of maturities of long-term debt during each of the years 2025 through 2029, including amounts due within one year and classified as current, are:

(Millions of dollars)	December 31,				
	2025	2026	2027	2028	2029
Machinery, Energy & Transportation	\$ 46	\$ 21	\$ 17	\$ 203	\$ 503
Financial Products	6,619	8,508	7,741	11	2,093
	<u>\$ 6,665</u>	<u>\$ 8,529</u>	<u>\$ 7,758</u>	<u>\$ 214</u>	<u>\$ 2,596</u>

Medium-term notes of \$1.25 billion maturing in the first quarter of 2025 were excluded from the current maturities of long-term debt in Statement 3 as of December 31, 2024 due to a \$1.25 billion issuance of medium-term notes on January 8, 2025 of which \$800 million and \$450 million mature in 2027 and 2030, respectively. The preceding maturity table reflects the reclassification of \$1.25 billion from maturities in 2025 to \$800 million in 2027 and \$450 million in 2030.

Interest paid on short-term and long-term borrowings for 2024, 2023 and 2022 was \$1,738 million, \$1,435 million and \$959 million, respectively.

Please refer to Note 18 for fair value information on long-term debt.

15. Credit commitments

(Millions of dollars)	December 31, 2024		
	Consolidated	Machinery, Energy & Transportation	Financial Products
Credit lines available:			
Global credit facilities	\$ 10,500	\$ 2,750	\$ 7,750
Other external	4,062	610	3,452
Total credit lines available	14,562	3,360	11,202
Less: Commercial paper outstanding	(3,946)	—	(3,946)
Less: Utilized credit	(687)	—	(687)
Available credit	<u>\$ 9,929</u>	<u>\$ 3,360</u>	<u>\$ 6,569</u>

As of December 31, 2024, we had three global credit facilities with a syndicate of banks totaling \$10.50 billion (Credit Facility) available in the aggregate to both Caterpillar and Cat Financial for general liquidity purposes. Based on management's allocation decision, which can be revised from time to time, the portion of the Credit Facility available to ME&T as of December 31, 2024 was \$2.75 billion. Information on our Credit Facility is as follows:

- In August 2024, we entered into a new 364-day facility. The 364-day facility of \$3.15 billion (of which \$825 million is available to ME&T) expires in August 2025.
- In August 2024, we amended and extended the three-year facility (as amended and restated, the "three-year facility"). The three-year facility of \$2.73 billion (of which \$715 million is available to ME&T) expires in August 2027.
- In August 2024, we amended and extended the five-year facility (as amended and restated, the "five-year facility"). The five-year facility of \$4.62 billion (of which \$1.21 billion is available to ME&T) expires in August 2029.

Other consolidated credit lines with banks as of December 31, 2024 totaled \$4.06 billion. These committed and uncommitted credit lines, which may be eligible for renewal at various future dates or have no specified expiration date, are used primarily by our subsidiaries for local funding requirements. Caterpillar or Cat Financial may guarantee subsidiary borrowings under these lines.

In the event Caterpillar or Cat Financial does not meet one or more of their respective financial covenants under the Credit Facility in the future (and are unable to obtain a consent or waiver), the syndicate of banks may terminate the commitments allocated to the party that does not meet its covenants. Additionally, in such event, certain of Cat Financial's other lenders under other loan agreements where similar financial covenants or cross default provisions are applicable may, at their election, choose to pursue remedies under those loan agreements, including accelerating the repayment of outstanding borrowings. At December 31, 2024, there were no borrowings under the Credit Facility, and Caterpillar and Cat Financial were in compliance with their respective financial covenants under the Credit Facility.

16. Profit per share

Computations of profit per share:				
(Dollars in millions except per share data)				
	2024	2023	2022	
Profit for the period (A) ¹	\$ 10,792	\$ 10,335	\$ 6,705	
Determination of shares (in millions):				
Weighted average number of common shares outstanding (B)	486.7	510.6	526.9	
Shares issuable on exercise of stock awards, net of shares assumed to be purchased out of proceeds at average market price	2.7	3.0	3.5	
Average common shares outstanding for fully diluted computation (C) ²	489.4	513.6	530.4	
Profit per share of common stock:				
Assuming no dilution (A/B)	\$ 22.17	\$ 20.24	\$ 12.72	
Assuming full dilution (A/C) ²	\$ 22.05	\$ 20.12	\$ 12.64	
Shares outstanding as of December 31, (in millions)	477.9	499.4	516.3	

¹ Profit attributable to common shareholders.

² Diluted by assumed exercise of stock-based compensation awards using the treasury stock method.

For the years ended December 31, 2024, 2023 and 2022, we excluded 0.3 million, 0.8 million and 2.0 million of outstanding stock options, respectively, from the computation of diluted earnings per share because the effect would have been antidilutive.

In July 2018, the Board approved a share repurchase authorization (the 2018 Authorization) of up to \$10.0 billion of Caterpillar common stock effective January 1, 2019, with no expiration. In May 2022, the Board approved a new share repurchase authorization (the 2022 Authorization) of up to \$15.0 billion of Caterpillar common stock effective August 1, 2022, with no expiration. Utilization of the 2022 Authorization for all share repurchases commenced on August 1, 2022, leaving \$70 million unutilized under the 2018 Authorization. In June 2024, the Board approved an additional share repurchase authorization (the 2024 Authorization) of up to \$20.0 billion of Caterpillar common stock, effective June 12, 2024, with no expiration. As of December 31, 2024, approximately \$20.1 billion remained available under the 2024 and 2022 Authorizations.

During 2024, 2023 and 2022, we repurchased 23.4 million, 19.5 million and 21.9 million shares of Caterpillar common stock, respectively, at an aggregate cost of \$8.0 billion, \$4.7 billion and \$4.2 billion, respectively. We made these purchases through a combination of accelerated share repurchase (ASR) agreements with third-party financial institutions and open market transactions.

In the first quarter of 2024, we entered into ASR agreements to repurchase an aggregate of \$3.50 billion of common stock. We advanced \$3.50 billion and received approximately 7.6 million shares of Caterpillar common stock with a value of \$2.45 billion. In the second quarter of 2024, we entered into ASR agreements to repurchase an aggregate of \$1.00 billion of common stock. We advanced \$1.00 billion and received approximately 2.2 million shares of Caterpillar common stock with a value of \$750 million. In the fourth quarter of 2024, upon final settlement of the ASRs, we received approximately 3.6 million additional shares.

17. Accumulated other comprehensive income (loss)

We present comprehensive income and its components in Statement 2. Changes in the balances for each component of AOCI were as follows:

(Millions of dollars)			
	2024	2023	2022
Foreign currency translation			
Beginning balance	\$ (1,782)	\$ (2,328)	\$ (1,508)
Gains (losses) on foreign currency translation	(535)	32	(794)
Less: Tax provision /(benefit)	21	(21)	26
Net gains (losses) on foreign currency translation	(556)	53	(820)
(Gains) losses reclassified to earnings	28	493	—
Less: Tax provision /(benefit)	—	—	—
Net (gains) losses reclassified to earnings	28	493	—
Other comprehensive income (loss), net of tax	(528)	546	(820)
Ending balance	\$ (2,310)	\$ (1,782)	\$ (2,328)
Pension and other postretirement benefits			
Beginning balance	\$ (49)	\$ (39)	\$ (62)
Current year prior service credit (cost)	—	1	33
Less: Tax provision /(benefit)	—	—	5
Net current year prior service credit (cost)	—	1	28
Amortization of prior service (credit) cost	(14)	(12)	(6)
Less: Tax provision /(benefit)	(2)	(1)	(1)
Net amortization of prior service (credit) cost	(12)	(11)	(5)
Other comprehensive income (loss), net of tax	(12)	(10)	23
Ending balance	\$ (61)	\$ (49)	\$ (39)
Derivative financial instruments			
Beginning balance	\$ 67	\$ 28	\$ (3)
Gains (losses) deferred	64	48	375
Less: Tax provision /(benefit)	27	11	86
Net gains (losses) deferred	37	37	289
(Gains) losses reclassified to earnings	(207)	3	(340)
Less: Tax provision /(benefit)	(57)	1	(82)
Net (gains) losses reclassified to earnings	(150)	2	(258)
Other comprehensive income (loss), net of tax	(113)	39	31
Ending balance	\$ (46)	\$ 67	\$ 28
Available-for-sale securities			
Beginning balance	\$ (56)	\$ (118)	\$ 20
Gains (losses) deferred	(2)	72	(179)
Less: Tax provision /(benefit)	—	11	(37)
Net gains (losses) deferred	(2)	61	(142)
(Gains) losses reclassified to earnings	4	1	5
Less: Tax provision /(benefit)	—	—	1
Net (gains) losses reclassified to earnings	4	1	4
Other comprehensive income (loss), net of tax	2	62	(138)
Ending balance	\$ (54)	\$ (56)	\$ (118)
Total AOCI Ending Balance at December 31,	\$ (2,471)	\$ (1,820)	\$ (2,457)

18. Fair value disclosures

A. Fair value measurements

The guidance on fair value measurements defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. This guidance also specifies a fair value hierarchy based upon the observability of inputs used in valuation techniques. Observable inputs (highest level) reflect market data obtained from independent sources, while unobservable inputs (lowest level) reflect internally developed market assumptions. In accordance with this guidance, fair value measurements are classified under the following hierarchy:

- **Level 1** — Quoted prices for identical instruments in active markets.
- **Level 2** — Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs or significant value-drivers are observable in active markets.
- **Level 3** — Model-derived valuations in which one or more significant inputs or significant value-drivers are unobservable.

When available, we use quoted market prices to determine fair value, and we classify such measurements within Level 1. In some cases where market prices are not available, we make use of observable market based inputs to calculate fair value, in which case the measurements are classified within Level 2. If quoted or observable market prices are not available, fair value is based upon valuations in which one or more significant inputs are unobservable, including internally developed models that use, where possible, current market-based parameters such as interest rates, yield curves and currency rates. These measurements are classified within Level 3.

We classify fair value measurements according to the lowest level input or value-driver that is significant to the valuation. We may therefore classify a measurement within Level 3 even though there may be significant inputs that are readily observable.

Fair value measurement includes the consideration of nonperformance risk. Nonperformance risk refers to the risk that an obligation (either by a counterparty or Caterpillar) will not be fulfilled. For financial assets traded in an active market (Level 1 and certain Level 2), the nonperformance risk is included in the market price. For certain other financial assets and liabilities (certain Level 2 and Level 3), our fair value calculations have been adjusted accordingly.

Investments in debt and equity securities

We have investments in certain debt and equity securities that are recorded at fair value. Fair values for our U.S. treasury bonds and large capitalization value and smaller company growth equity securities are based upon valuations for identical instruments in active markets. Fair values for other government debt securities, corporate debt securities and mortgage-backed debt securities are based upon models that take into consideration such market-based factors as recent sales, risk-free yield curves and prices of similarly rated bonds.

We also have investments in time deposits classified as held-to-maturity debt securities. The fair value of these investments is based upon valuations observed in less active markets than Level 1. These investments have a maturity of less than one year and are recorded at amortized costs, which approximate fair value.

In addition, Insurance Services has an equity investment in a real estate investment trust (REIT) which is recorded at fair value based on the net asset value (NAV) of the investment and is not classified within the fair value hierarchy.

See Note 11 for additional information on our investments in debt and equity securities.

Derivative financial instruments

The fair value of interest rate contracts is primarily based on a standard industry accepted valuation model that utilizes the appropriate market-based forward swap curves and zero-coupon interest rates to determine discounted cash flows. The fair value of foreign currency and commodity forward, option and cross currency contracts is based on standard industry accepted valuation models that discount cash flows resulting from the differential between the contract price and the market-based forward rate. The fair value of total return swap contracts is primarily based on valuing the underlying securities or funds using pricing by industry providers and the average Secured Overnight Financing Rate (SOFR) plus a spread.

See Note 4 for additional information.

Assets and liabilities measured on a recurring basis at fair value included in Statement 3 as of December 31, 2024 and 2023 were as follows:

(Millions of dollars)	December 31, 2024				
	Level 1	Level 2	Level 3	Measured at NAV	Total Assets / Liabilities, at Fair Value
Assets					
Debt securities					
Government debt securities					
U.S. treasury bonds	\$ 10	\$ —	\$ —	\$ —	\$ 10
Other U.S. and non-U.S. government bonds	—	68	—	—	68
Corporate debt securities					
Corporate bonds and other debt securities	—	3,170	—	—	3,170
Asset-backed securities	—	219	—	—	219
Mortgage-backed debt securities					
U.S. governmental agency	—	443	—	—	443
Residential	—	2	—	—	2
Commercial	—	130	—	—	130
Total debt securities	10	4,032	—	—	4,042
Equity securities					
Large capitalization value	261	—	—	—	261
Smaller company growth	41	—	—	—	41
REIT	—	—	—	167	167
Total equity securities	302	—	—	167	469
Derivative financial instruments - assets					
Foreign currency contracts - net	—	117	—	—	117
Total assets	\$ 312	\$ 4,149	\$ —	\$ 167	\$ 4,628
Liabilities					
Derivative financial instruments - liabilities					
Interest rate contracts - net	\$ —	\$ 191	\$ —	\$ —	\$ 191
Commodity contracts - net	—	2	—	—	2
Total return swap contracts - net	—	33	—	—	33
Total liabilities	\$ —	\$ 226	\$ —	\$ —	\$ 226

	December 31, 2023				
(Millions of dollars)	Level 1	Level 2	Level 3	Measured at NAV	Total Assets / Liabilities, at Fair Value
Assets					
Debt securities					
Government debt securities					
U.S. treasury bonds	\$ 10	\$ —	\$ —	\$ —	\$ 10
Other U.S. and non-U.S. government bonds	—	60	—	—	60
Corporate debt securities					
Corporate bonds and other debt securities	—	2,995	—	—	2,995
Asset-backed securities	—	192	—	—	192
Mortgage-backed debt securities					
U.S. governmental agency	—	410	—	—	410
Residential	—	2	—	—	2
Commercial	—	128	—	—	128
Total debt securities	10	3,787	—	—	3,797
Equity securities					
Large capitalization value	223	—	—	—	223
Smaller company growth	35	—	—	—	35
REIT	—	—	—	180	180
Total equity securities	258	—	—	180	438
Derivative financial instruments - assets					
Foreign currency contracts - net	—	207	—	—	207
Commodity contracts - net	—	9	—	—	9
Total assets	<u>\$ 268</u>	<u>\$ 4,003</u>	<u>\$ —</u>	<u>\$ 180</u>	<u>\$ 4,451</u>
Liabilities					
Derivative financial instruments - liabilities					
Interest rate contracts - net	\$ —	\$ 151	\$ —	\$ —	\$ 151
Total liabilities	<u>\$ —</u>	<u>\$ 151</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 151</u>

In addition to the amounts above, certain Cat Financial loans are subject to measurement at fair value on a nonrecurring basis and are classified as Level 3 measurements. A loan is measured at fair value when management determines that collection of contractual amounts due is not probable and the loan is individually evaluated. In these cases, an allowance for credit losses may be established based either on the present value of expected future cash flows discounted at the receivables' effective interest rate, the fair value of the collateral for collateral-dependent receivables, or the observable market price of the receivable. In determining collateral value, Cat Financial estimates the current fair market value of the collateral less selling costs. Cat Financial had loans carried at fair value of \$59 million and \$55 million as of December 31, 2024 and 2023, respectively.

B. Fair values of financial instruments

In addition to the methods and assumptions we use to record the fair value of financial instruments as discussed in the Fair value measurements section above, we use the following methods and assumptions to estimate the fair value of our financial instruments:

Cash and cash equivalents

Carrying amount approximates fair value. We classify cash and cash equivalents as Level 1. See Statement 3.

Restricted cash and short-term investments

Carrying amount approximates fair value. We include restricted cash and short-term investments in Prepaid expenses and other current assets in Statement 3. We classify these instruments as Level 1 except for time deposits which are Level 2. See Note 11 for additional information.

Finance receivables

We estimate fair value by discounting the future cash flows using current rates, representative of receivables with similar remaining maturities.

Wholesale inventory receivables

We estimate fair value by discounting the future cash flows using current rates, representative of receivables with similar remaining maturities.

Short-term borrowings

Carrying amount approximates fair value. We classify short-term borrowings as Level 1. See Note 13 for additional information.

Long-term debt

We estimate fair value for fixed and floating rate debt based on quoted market prices.

Our financial instruments not carried at fair value were as follows:

(Millions of dollars)	2024		2023		Fair Value Levels	Reference
	Carrying Amount	Fair Value	Carrying Amount	Fair Value		
Assets at December 31,						
Finance receivables-net (excluding finance leases ¹)	\$ 16,180	\$ 15,788	\$ 15,386	\$ 15,017	3	Note 7
Wholesale inventory receivables-net (excluding finance leases ¹)	1,568	1,527	1,415	1,368	3	Note 7
Liabilities at December 31,						
Long-term debt (including amounts due within one year):						
Machinery, Energy & Transportation	8,610	7,980	9,623	9,550	2	Note 14
Financial Products	25,406	25,304	23,612	23,299	2	Note 14

¹ Represents finance leases and failed sale leasebacks of \$6,769 million and \$6,953 million at December 31, 2024 and 2023, respectively.

19. Supplier finance programs

We facilitate voluntary supplier finance programs (the “Programs”) through participating financial institutions. The Programs are available to a wide range of suppliers and allow them the option to manage their cash flow. We are not a party to the agreements between the participating financial institutions and the suppliers in connection with the Programs. The range of payment terms, typically 60-90 days, we negotiate with our suppliers is consistent, irrespective of whether a supplier participates in the Programs. The amount of obligations outstanding that are confirmed as valid to the participating financial institutions for suppliers who voluntarily participate in the Programs, included in Accounts payable in Statement 3, were \$830 million and \$803 million at December 31, 2024 and 2023, respectively.

The rollforward of our outstanding obligations confirmed as valid under the Programs for the year ended December 31, 2024 was as follows:

(Millions of dollars)	2024
Confirmed obligations outstanding, beginning of period	\$ 803
Invoices confirmed during the period	5,140
Confirmed invoices paid during the period	(5,113)
Confirmed obligations outstanding, end of period	\$ 830

20. Leases

A. Lessee arrangements

We lease certain property, information technology equipment, warehouse equipment, vehicles and other equipment through operating leases. We recognize a lease liability and corresponding right-of-use asset based on the present value of lease payments. To determine the present value of lease payments for most of our leases, we use our incremental borrowing rate based on information available on the lease commencement date. For certain property and information technology equipment leases, we have elected to separate payments for lease components from non-lease components. For all other leases, we have elected not to separate payments for lease and non-lease components. Our lease agreements may include options to extend or terminate the lease. When it is reasonably certain that we will exercise that option, we have included the option in the recognition of right-of-use assets and lease liabilities. We have elected not to recognize right-of-use assets or lease liabilities for leases with a term of twelve months or less.

Our finance leases are not significant and therefore are not included in the following disclosures.

The components of lease costs were as follows:

(Millions of dollars)	Years Ended December 31,		
	2024	2023	2022
Operating lease cost	\$ 185	\$ 189	\$ 187
Short-term lease cost	\$ 65	\$ 62	\$ 59

We recognize operating lease right-of-use assets in Other assets in Statement 3. We recognize the operating lease liabilities in Other current liabilities and Other liabilities.

Supplemental information related to leases was as follows:

(Millions of dollars)	December 31, 2024	December 31, 2023
Operating Leases		
Other assets	\$ 592	\$ 556
Other current liabilities	\$ 143	\$ 147
Other liabilities	\$ 459	\$ 427
Weighted average remaining lease term		
Operating leases	7 years	7 years
Weighted average discount rates		
Operating leases	3 %	3 %

Maturities of operating lease liabilities were as follows:

(Millions of dollars)	December 31, 2024
Amounts Due In	
2025	\$ 157
2026	120
2027	93
2028	67
2029	55
Thereafter	187
Total lease payments	679
Less: Imputed interest	(77)
Total	\$ 602

Supplemental cash flow information related to leases was as follows:

(Millions of dollars)	Years ended December 31,		
	2024	2023	2022
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows from operating leases	\$ 179	\$ 180	\$ 178
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	\$ 187	\$ 148	\$ 123

B. Lessor arrangements

We lease Caterpillar machinery, engines and other equipment to customers and dealers around the world, primarily through Cat Financial. Cat Financial leases to customers primarily through sales-type (non-tax) leases, where the lessee for tax purposes is considered to be the owner of the equipment during the term of the lease. Cat Financial also offers tax leases that are classified as either operating or direct finance leases for financial accounting purposes, depending on the characteristics of the lease. For tax purposes, Cat Financial is considered the owner of the equipment. Our lease agreements may include options for the lessee to purchase the underlying asset at the end of the lease term for either a stated fixed price or fair market value.

We determine the residual value of Cat Financial's leased equipment based on its estimated end-of-term market value. We estimate the residual value of leased equipment at the inception of the lease based on a number of factors, including historical wholesale market sales prices, past remarketing experience and any known significant market/product trends. We also consider the following critical factors in our residual value estimates: lease term, market size and demand, total expected hours of usage, machine configuration, application, location, model changes, quantities, third-party residual guarantees and contractual customer purchase options.

During the term of our leases, we monitor residual values. For operating leases, we record adjustments to depreciation expense reflecting changes in residual value estimates prospectively on a straight-line basis. For finance leases, we recognize residual value adjustments through a reduction of finance revenue over the remaining lease term.

See Note 7 for contractual maturities of finance lease receivables (sales-type and direct finance leases).

The carrying amount of equipment leased to others, included in Property, plant and equipment - net in Statement 3, under operating leases was as follows:

(Millions of dollars)	December 31,	
	2024	2023
Equipment leased to others - at original cost	\$ 5,701	\$ 5,837
Less: Accumulated depreciation	(1,927)	(1,902)
Equipment leased to others - net	<u>\$ 3,774</u>	<u>\$ 3,935</u>

Payments due for operating leases as of December 31, 2024, were as follows:

(Millions of dollars)	2025	2026	2027	2028	2029	Thereafter	Total
	\$868	\$555	\$317	\$176	\$67	\$37	\$2,020

Revenues from finance and operating leases, primarily included in Revenues of Financial Products on Statement 1, were as follows:

(Millions of dollars)	Year ended December 31,		
	2024	2023	2022
Finance lease revenue	\$ 440	\$ 420	\$ 430
Operating lease revenue	1,212	1,166	1,085
Total	<u>\$ 1,652</u>	<u>\$ 1,586</u>	<u>\$ 1,515</u>

We present revenues net of sales and other related taxes.

21. Guarantees and product warranty

We have provided various guarantees that have varying terms and limit potential payment. Under the guarantees, non-performance by the third parties could require Caterpillar to satisfy the contractual obligation by providing goods, services or financial compensation. The maximum potential amount of future payments (undiscounted and without reduction for any amounts possibly recoverable) that we could be required to make under the guarantees was \$368 million and \$353 million at December 31, 2024 and 2023, respectively.

We have dealer performance guarantees and third-party performance guarantees that do not limit potential payment to end users related to indemnities and other commercial contractual obligations. In addition, we have entered into contracts involving industry standard indemnifications that do not limit potential payment. For these unlimited guarantees, we are unable to estimate a maximum potential amount of future payments that could result from claims made.

No significant loss has been experienced or is anticipated under any of these guarantees.

Cat Financial provides guarantees to purchase certain loans of Caterpillar dealers from a special-purpose corporation (SPC) that qualifies as a variable interest entity. Cat Financial receives a fee for providing this guarantee. The purpose of the SPC is to provide short-term working capital loans to Caterpillar dealers. This SPC issues commercial paper and uses the proceeds to fund its loan program. Cat Financial is the primary beneficiary of the SPC as its guarantees result in Cat Financial having both the power to direct the activities that most significantly impact the SPC's economic performance and the obligation to absorb losses, and therefore Cat Financial has consolidated the financial statements of the SPC. As of December 31, 2024 and 2023, the SPC's assets of \$1.14 billion and \$1.35 billion, respectively, were primarily comprised of loans to dealers, and the SPC's liabilities of \$1.14 billion and \$1.35 billion, respectively, were primarily comprised of commercial paper. The assets of the SPC are not available to pay Cat Financial's creditors. Cat Financial may be obligated to perform under the guarantee if the SPC experiences losses. No loss has been experienced or is anticipated under this loan purchase agreement.

Cat Financial has commitments to extend credit to customers through lines of credit and other pre-approved credit arrangements. Cat Financial applies the same credit policies and approval process for these commitments as we do for other financing. Collateral is not required, but if credit is extended, collateral is generally required upon funding. The unused commitments to extend credit to customers that are not unconditionally cancellable was \$843 million at December 31, 2024. Cat Financial also has pre-approved lines of credit and other credit arrangements with Caterpillar dealers; however, we generally have the right to unconditionally cancel, alter, or amend the terms at any time.

We determine our product warranty liability by applying historical claim rate experience to the current field population and dealer inventory. Generally, we base historical claim rates on actual warranty experience for each product by machine model/engine size by customer or dealer location (inside or outside North America). We develop specific rates for each product shipment month and update them monthly based on actual warranty claim experience.

The reconciliation of the change in our product warranty liability balances for the years ended December 31, was as follows:

(Millions of dollars)	2024	2023
Warranty liability, beginning of period	\$ 1,894	\$ 1,761
Reduction in liability (payments)	(824)	(835)
Increase in liability (new warranties)	630	968
Warranty liability, end of period	\$ 1,700	\$ 1,894

22. Environmental and legal matters

The Company is regulated by federal, state and international environmental laws governing its use, transport and disposal of substances and control of emissions. In addition to governing our manufacturing and other operations, these laws often impact the development of our products, including, but not limited to, required compliance with air emissions standards applicable to internal combustion engines. We have made, and will continue to make, significant research and development and capital expenditures to comply with these emissions standards.

We are engaged in remedial activities at a number of locations, often with other companies, pursuant to federal and state laws. When it is probable we will pay remedial costs at a site, and those costs can be reasonably estimated, we accrue the investigation, remediation, and operating and maintenance costs against our earnings. We accrue costs based on consideration of currently available data and information with respect to each individual site, including available technologies, current applicable laws and regulations, and prior remediation experience. Where no amount within a range of estimates is more likely, we accrue the minimum. Where multiple potentially responsible parties are involved, we consider our proportionate share of the probable costs. In formulating the estimate of probable costs, we do not consider amounts expected to be recovered from insurance companies or others. We reassess these accrued amounts on a quarterly basis. The amount recorded for environmental remediation is not material and is included in Accrued expenses. We believe there is no more than a remote chance that a material amount for remedial activities at any individual site, or at all the sites in the aggregate, will be required.

Our operations in Brazil are subject to highly complex labor, tax, customs and other laws. While we believe that we are in compliance with such laws, we are periodically engaged in litigation regarding the application of these laws, including certain tax and customs disputes with federal, state and municipal authorities in Brazil relating to export activities associated with Caterpillar Brasil Ltda. The Company is unable to predict the outcome or reasonably estimate any potential losses; however, we currently believe that any matters raised will not have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

In addition, we are involved in other unresolved legal actions that arise in the normal course of business. The most prevalent of these unresolved actions involve disputes related to product design, manufacture and performance liability (including claimed asbestos exposure), contracts, employment issues, environmental matters, intellectual property rights, taxes (other than income taxes) and securities laws. The aggregate range of reasonably possible losses in excess of accrued liabilities, if any, associated with these unresolved legal actions is not material. In some cases, we cannot reasonably estimate a range of loss because there is insufficient information regarding the matter. However, we believe there is no more than a remote chance that any liability arising from these matters would be material. Although it is not possible to predict with certainty the outcome of these unresolved legal actions, we believe that these actions will not individually or in the aggregate have a material adverse effect on our consolidated results of operations, financial position or liquidity.

23. Segment information

A. Basis for segment information

Our Executive Office is comprised of a Chief Executive Officer (CEO), Chief Operating Officer (COO), four Group Presidents, a Chief Financial Officer (CFO), a Chief Legal Officer and General Counsel and a Chief Human Resources Officer. The COO, Group Presidents and CFO are accountable for a related set of end-to-end businesses that they manage. The Chief Legal Officer and General Counsel leads the Law, Security and Public Policy Division. The Chief Human Resources Officer leads the Human Resources Organization. The CEO allocates resources and manages performance at the COO/Group President/CFO level. As such, the CEO serves as our Chief Operating Decision Maker (CODM), and operating segments are primarily based on the COO/Group President/CFO reporting structure.

Three of our operating segments, Construction Industries, Resource Industries and Energy & Transportation are led by Group Presidents. One operating segment, Financial Products, is led by the CFO who also has responsibility for Corporate Services. Corporate Services is a cost center primarily responsible for the performance of certain support functions globally and to provide centralized services; it does not meet the definition of an operating segment. One Group President leads one smaller operating segment that is included in the All Other Segment. The Law, Security and Public Policy Division and the Human Resources Organization are cost centers and do not meet the definition of an operating segment.

B. Description of segments

We have five operating segments, of which four are reportable segments. Following is a brief description of our reportable segments and the business activities included in the All Other Segment:

Construction Industries: A segment primarily responsible for supporting customers using machinery in infrastructure and building construction applications. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes asphalt pavers; backhoe loaders; cold planers; compactors; compact track loaders; forestry machines; material handlers; motor graders; pipelayers; road reclaimers; skid steer loaders; telehandlers; track-type loaders; track-type tractors (small, medium); track excavators (mini, small, medium, large); wheel excavators; wheel loaders (compact, small, medium); and related parts and work tools. Inter-segment sales are a source of revenue for this segment.

Resource Industries: A segment primarily responsible for supporting customers using machinery in mining, heavy construction and quarry and aggregates. Responsibilities include business strategy, product design, product management and development, manufacturing, marketing and sales and product support. The product portfolio includes large track-type tractors; large mining trucks; hard rock vehicles; electric rope shovels; draglines; hydraulic shovels; rotary drills; large wheel loaders; off-highway trucks; articulated trucks; wheel tractor scrapers; wheel dozers; landfill compactors; soil compactors; wide-body trucks; select work tools; machinery components; electronics and control systems and related parts. In addition to equipment, Resource Industries also develops and sells technology products and services to provide customers fleet management, equipment management analytics, autonomous machine capabilities, safety services and mining performance solutions. Resource Industries also manages areas that provide services to other parts of the company, including strategic procurement, lean center of excellence, integrated manufacturing, research and development for hydraulic systems, automation, electronics and software for Caterpillar machines and engines. Inter-segment sales are a source of revenue for this segment.

Energy & Transportation: A segment primarily responsible for supporting customers using reciprocating engines, turbines, diesel-electric locomotives and related services across industries serving Oil and Gas, Power Generation, Industrial and Transportation applications, including marine- and rail-related businesses as well as product support of on-highway engines. Responsibilities include business strategy, product design, product management, development and testing, manufacturing, marketing and sales and product support. The product and services portfolio includes turbines, centrifugal gas compressors, and turbine-related services; reciprocating engine-powered generator sets; integrated systems and solutions used in the electric power generation industry; reciprocating engines, drivetrain and integrated systems and solutions for the marine and oil and gas industries; reciprocating engines, drivetrain and integrated systems and solutions supplied to the industrial industry as well as Caterpillar machines; electrified powertrain and zero-emission power sources and service solutions development; and diesel-electric locomotives and components and other rail-related products and services, including remanufacturing and leasing. Responsibilities also include the remanufacturing of Caterpillar reciprocating engines and components and remanufacturing services for other companies. Inter-segment sales are a source of revenue for this segment.

Financial Products Segment: Provides financing alternatives to customers and dealers around the world for Caterpillar products and services, as well as financing for power generation facilities that, in most cases, incorporate Caterpillar products. Financing plans include operating and finance leases, revolving charge accounts, installment sale contracts, repair/rebuild financing, working capital loans and wholesale financing plans. The segment also provides insurance and risk management products and services that help customers and dealers manage their business risk. Insurance and risk management products offered include physical damage insurance, inventory protection plans, extended service coverage and maintenance plans for machines and engines, and dealer property and casualty insurance. The various forms of financing, insurance and risk management products offered to customers and dealers help support the purchase and lease of Caterpillar equipment. The segment also earns revenues from ME&T, but the related costs are not allocated to operating segments. Financial Products' segment profit is determined on a pretax basis and includes other income (expense) items.

All Other Segment: Primarily includes activities such as: business strategy; product management and development; manufacturing and sourcing of wear and maintenance components primarily for Cat® products; parts distribution; integrated logistics solutions; distribution services responsible for dealer development and administration, including a wholly owned dealer in Japan; dealer portfolio management and ensuring the most efficient and effective distribution of machines, engines and parts; brand management and marketing strategy; and digital investments for new customer and dealer solutions that integrate data analytics with state-of-the-art digital technologies while transforming the buying experience. Results for the All Other Segment are included as a reconciling item between reportable segments and consolidated external reporting.

C. Segment measurement and reconciliations

We determine the segment profit of Construction Industries, Resource Industries, Energy & Transportation and our All Other Segment on a pretax basis and exclude most interest expense and certain other income (expense) items. We determine Financial Products Segment profit on a pretax basis and include other income (expense) items.

Our CODM evaluates the operating performance of the segments using segment profit as it provides insight into the financial health of each segment. The CODM reviews this metric regularly to compare the profitability of segments, identify trends, and evaluate which segments require additional resources or strategic adjustments. The CODM uses segment profit to support the allocation of resources predominantly in the annual budget and forecasting process. Additionally, the CODM monitors forecast-to-actual variances, focusing on areas where performance deviates from expectations, when evaluating the performance of each segment and making decisions about allocating capital and other resources to each segment.

There are several methodology differences between our segment reporting and our external reporting. The following is a list of the more significant methodology differences:

- For Construction Industries, Resource Industries, Energy & Transportation and our All Other Segment, net assets generally include inventories, receivables, property, plant and equipment, goodwill, intangibles, accounts payable and customer advances. We generally manage at the corporate level liabilities other than accounts payable and customer advances, and we do not include these in segment operations. Financial Products Segment assets generally include all categories of assets.
- We value segment inventories and cost of sales using a current cost methodology.
- We amortize goodwill allocated to segments using a fixed amount based on a 20-year useful life. This methodology difference only impacts segment assets. We do not include goodwill amortization expense in segment profit. In addition, we have allocated to segments only a portion of goodwill for certain acquisitions made in 2011 or later.
- We generally manage currency exposures for operating segments, other than Financial Products, at the corporate level and do not include in segment profit the effects of changes in exchange rates on results of operations within the year. We report the net difference created in the translation of revenues and costs between exchange rates used for U.S. GAAP reporting and exchange rates used for segment reporting as a methodology difference.
- We do not include stock-based compensation expense in segment profit.
- Postretirement benefit expenses are split; segments are generally responsible for service costs, with the remaining elements of net periodic benefit cost included as a methodology difference.

Reconciling items are created based on accounting differences between segment reporting and our consolidated external reporting. Please refer to pages 119 to 120 for financial information regarding significant reconciling items. Most of our reconciling items are self-explanatory given the above explanations. For the reconciliation of profit, we have grouped the reconciling items as follows:

- **Corporate costs:** These costs are related to corporate requirements primarily for compliance and legal functions for the benefit of the entire organization.
- **Restructuring income/costs:** May include costs for employee separation, long-lived asset impairments, contract terminations and (gains)/losses on divestitures. These costs are included in Other operating (income) expenses except for defined-benefit plan curtailment losses and special termination benefits, which are included in Other income (expense). Restructuring costs also include other exit-related costs, which may consist of accelerated depreciation, inventory write-downs, building demolition, equipment relocation and project management costs and LIFO inventory decrement benefits from inventory liquidations at closed facilities, all of which are primarily included in Cost of goods sold. See Note 24 for more information.
- **Methodology differences:** See previous discussion of significant accounting differences between segment reporting and consolidated external reporting.

- **Timing:** Timing differences in the recognition of costs between segment reporting and consolidated external reporting. For example, we report certain costs on the cash basis for segment reporting and the accrual basis for consolidated external reporting.

For the years ended December 31, 2024, 2023 and 2022, sales and revenues by geographic region reconciled to consolidated sales and revenues were as follows:

Sales and Revenues by Geographic Region							
(Millions of dollars)							
	North America	Latin America	EAME	Asia/Pacific	External Sales and Revenues	Intersegment Sales and Revenues	Total Sales and Revenues
2024							
Construction Industries	\$ 14,576	\$ 2,553	\$ 4,315	\$ 3,900	\$ 25,344	\$ 111	\$ 25,455
Resource Industries	4,561	2,077	1,804	3,576	12,018	371	12,389
Energy & Transportation	13,005	1,763	5,787	3,533	24,088	4,766	28,854
Financial Products Segment	2,702	402	505	444	4,053 ¹	—	4,053
Total sales and revenues from reportable segments	34,844	6,795	12,411	11,453	65,503	5,248	70,751
All Other Segment	56	—	12	50	118	307	425
Corporate Items and Eliminations	(503)	(87)	(107)	(115)	(812)	(5,555)	(6,367)
Total Sales and Revenues	\$ 34,397	\$ 6,708	\$ 12,316	\$ 11,388	\$ 64,809	\$ —	\$ 64,809
2023							
Construction Industries	\$ 15,343	\$ 2,307	\$ 5,254	\$ 4,390	\$ 27,294	\$ 124	\$ 27,418
Resource Industries	5,256	2,040	2,069	3,879	13,244	339	13,583
Energy & Transportation	11,982	1,983	5,929	3,461	23,355	4,646	28,001
Financial Products Segment	2,440	416	491	438	3,785 ¹	—	3,785
Total sales and revenues from reportable segments	35,021	6,746	13,743	12,168	67,678	5,109	72,787
All Other Segment	65	(1)	18	49	131	318	449
Corporate Items and Eliminations	(480)	(80)	(88)	(101)	(749)	(5,427)	(6,176)
Total Sales and Revenues	\$ 34,606	\$ 6,665	\$ 13,673	\$ 12,116	\$ 67,060	\$ —	\$ 67,060
2022							
Construction Industries	\$ 12,367	\$ 2,843	\$ 5,099	\$ 4,818	\$ 25,127	\$ 142	\$ 25,269
Resource Industries	4,531	1,840	2,205	3,437	12,013	301	12,314
Energy & Transportation	9,175	1,784	5,232	3,146	19,337	4,415	23,752
Financial Products Segment	2,078	348	396	431	3,253 ¹	—	3,253
Total sales and revenues from reportable segments	28,151	6,815	12,932	11,832	59,730	4,858	64,588
All Other Segment	64	2	(66)	145	145	305	450
Corporate Items and Eliminations	(234)	(79)	(52)	(83)	(448)	(5,163)	(5,611)
Total Sales and Revenues	\$ 27,981	\$ 6,738	\$ 12,814	\$ 11,894	\$ 59,427	\$ —	\$ 59,427

¹ Includes revenues from Construction Industries, Resource Industries, Energy & Transportation and All Other Segment of \$711 million, \$690 million and \$478 million in the years ended December 31, 2024, 2023 and 2022, respectively.

For the years ended December 31, 2024, 2023 and 2022, Energy & Transportation segment sales by end user application were as follows:

Energy & Transportation External Sales			
(Millions of dollars)			
	2024	2023	2022
Oil and gas	\$ 6,980	\$ 6,988	\$ 5,330
Power generation	7,756	6,362	4,940
Industrial	3,990	4,871	4,426
Transportation	5,362	5,134	4,641
Energy & Transportation External Sales	\$ 24,088	\$ 23,355	\$ 19,337

Profit from Reportable Segments
(Millions of dollars)

	Construction Industries	Resource Industries	Energy & Transportation	Financial Products Segment	Total from Reportable Segments
2024					
Sales and revenues	\$ 25,455	\$ 12,389	\$ 28,854	\$ 4,053	\$ 70,751
Less ¹ :					
Cost of goods sold	17,326	8,387	19,796	—	45,509
SG&A/R&D ²	1,931	1,451	3,241	771	7,394
Other segment items ³	33	18	81	2,350	2,482
Segment Profit	\$ 6,165	\$ 2,533	\$ 5,736	\$ 932	\$ 15,366
2023					
Sales and revenues	\$ 27,418	\$ 13,583	\$ 28,001	\$ 3,785	\$ 72,787
Less ¹ :					
Cost of goods sold	18,658	9,367	19,875	—	47,900
SG&A/R&D ²	1,844	1,389	3,084	691	7,008
Other segment items ³	(59)	(7)	106	2,185	2,225
Segment Profit	\$ 6,975	\$ 2,834	\$ 4,936	\$ 909	\$ 15,654
2022					
Sales and revenues	\$ 25,269	\$ 12,314	\$ 23,752	\$ 3,253	\$ 64,588
Less ¹ :					
Cost of goods sold	18,924	9,249	17,931	—	46,104
SG&A/R&D ²	1,629	1,308	2,655	660	6,252
Other segment items ³	(27)	(70)	(143)	1,729	1,489
Segment Profit	\$ 4,743	\$ 1,827	\$ 3,309	\$ 864	\$ 10,743

¹ The significant expense categories and amounts align with the segment-level information that is regularly provided to the CODM. Inter-segment income/expenses are included within the amounts shown.

² Includes selling, general and administrative (SG&A) and research and development (R&D) expenses. The combined presentation aligns with the segment-level information that is regularly provided to the CODM.

³ Other segment items for each reportable segment primarily includes:

Construction Industries – other operating (income) expenses, currency impacts defined as a methodology difference between exchange rates used in U.S. GAAP and segment reporting, and equity in (profit) loss of unconsolidated affiliated companies.

Resource Industries – other operating (income) expenses, currency impacts defined as a methodology difference between exchange rates used in U.S. GAAP and segment reporting, and equity in (profit) loss of unconsolidated affiliated companies.

Energy & Transportation – other operating (income) expenses, currency impacts defined as a methodology difference between exchange rates used in U.S. GAAP and segment reporting, and equity in (profit) loss of unconsolidated affiliated companies.

Financial Products Segment – interest expense, Cat Financial's depreciation on equipment leased to others, Insurance Services' underwriting expenses and investment and interest income, and foreign exchange (gains) losses.

Reconciliation of Consolidated profit before taxes:
(Millions of dollars)

	2024	2023	2022
Total profit from reportable segments	15,366	15,654	10,743
Profit from All Other Segment	48	18	(11)
Cost centers	(1)	(7)	(13)
Corporate costs	(889)	(913)	(751)
Timing	133	(30)	(309)
Restructuring costs	(359)	(780)	(299)
Methodology differences:			
Inventory/cost of sales	33	160	413
Postretirement benefit income (expense)	67	(65)	916
Stock-based compensation expense	(223)	(208)	(193)
Financing costs	(126)	(91)	(331)
Currency	145	6	23
Goodwill impairment charge	—	—	(925)
Other income/expense methodology differences	(740)	(624)	(409)
Other methodology differences	(81)	(70)	(102)
Total consolidated profit before taxes	<u>\$ 13,373</u>	<u>\$ 13,050</u>	<u>\$ 8,752</u>

Reconciliation of Assets:
(Millions of dollars)

	December 31,	
	2024	2023
Assets from reportable segments:		
Construction Industries	\$ 5,546	\$ 5,384
Resource Industries	5,548	5,742
Energy & Transportation	11,772	10,555
Financial Products Segment	36,925	35,685
Total assets from reportable segments	<u>59,791</u>	<u>57,366</u>
Assets from All Other Segment	1,937	1,890
Items not included in segment assets:		
Cash and cash equivalents	6,165	6,106
Deferred income taxes	3,194	2,668
Goodwill and intangible assets	4,478	4,452
Property, plant and equipment – net and other assets	4,808	6,548
Inventory methodology differences	(3,560)	(3,169)
Liabilities included in segment assets	11,973	11,781
Other	(1,022)	(166)
Total assets	<u>\$ 87,764</u>	<u>\$ 87,476</u>

Reconciliation of Depreciation and amortization:
(Millions of dollars)

	2024	2023	2022
Depreciation and amortization from reportable segments:			
Construction Industries	\$ 233	\$ 221	\$ 231
Resource Industries	260	302	368
Energy & Transportation	578	551	547
Financial Products Segment	740	731	734
Total depreciation and amortization from reportable segments	1,811	1,805	1,880
Items not included in segment depreciation and amortization:			
All Other Segment	254	236	229
Cost centers	95	91	84
Other	(7)	12	26
Total depreciation and amortization	\$ 2,153	\$ 2,144	\$ 2,219

Reconciliation of Capital expenditures:
(Millions of dollars)

	2024	2023	2022
Capital expenditures from reportable segments:			
Construction Industries	\$ 323	\$ 376	\$ 271
Resource Industries	268	245	237
Energy & Transportation	1,279	944	756
Financial Products Segment	1,085	1,299	1,141
Total capital expenditures from reportable segments	2,955	2,864	2,405
Items not included in segment capital expenditures:			
All Other Segment	245	260	219
Cost centers	193	102	76
Timing	(149)	(44)	(54)
Other	(29)	(90)	(47)
Total capital expenditures	\$ 3,215	\$ 3,092	\$ 2,599

Enterprise-wide Disclosures:
Information about Geographic Areas:

(Millions of dollars)	External sales and revenues ¹			Property, plant and equipment - net	
	2024	2023	2022	December 31, 2024	December 31, 2023
Inside United States	\$ 30,624	\$ 31,053	\$ 24,368	\$ 8,213	\$ 7,658
Outside United States	34,185	36,007	35,059	5,148	5,022
Total	\$ 64,809	\$ 67,060	\$ 59,427	\$ 13,361	\$ 12,680

¹ Sales of ME&T are based on dealer or customer location. Revenues from services provided are based on where service is rendered.

24. Restructuring income/costs

Our accounting for employee separations is dependent upon how the particular program is designed. For voluntary programs, we recognize eligible separation costs at the time of employee acceptance unless the acceptance requires explicit approval by the company. For involuntary programs, we recognize eligible costs when management has approved the program, the affected employees have been properly notified and the costs are estimable.

Restructuring costs for 2024, 2023 and 2022 were as follows:

(Millions of dollars)	2024	2023	2022
Employee separations ¹	\$ 64	\$ 74	\$ 77
Divestitures ¹	164	586	—
Contract terminations ¹	7	7	1
Long-lived asset impairments ¹	6	3	6
Other ²	118	110	215
Total restructuring (income) costs	<u>\$ 359</u>	<u>\$ 780</u>	<u>\$ 299</u>

¹ Recognized in Other operating (income) expenses.

² Represents costs related to our restructuring programs, primarily for inventory write-downs, project management, equipment relocation and accelerated depreciation, all of which are primarily included in Cost of goods sold.

The restructuring costs in 2024 were related to restructuring actions across the company including the divestitures of certain non-U.S. entities. The restructuring costs in 2023 were primarily related to the divestiture of the company's Longwall business within Resource Industries. The divestiture closed on February 1, 2023 and resulted in a pre-tax loss of approximately \$586 million, primarily a non-cash item driven by the release of \$494 million of accumulated foreign currency translation. The restructuring costs in 2022 were primarily related to actions across the company, including \$193 million related to the Rail division that was primarily inventory write-downs, and other strategic actions to address a small number of products. The inventory write-downs were included in "Other" in the table above.

In 2024, 2023 and 2022, all restructuring costs were excluded from segment profit.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

Not Applicable.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of the company's management, including the Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and operation of the company's disclosure controls and procedures, as that term is defined in Rule 13a-15(e) under the Exchange Act, as of the end of the period covered by this annual report. Based on that evaluation, the CEO and CFO concluded that the company's disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management's Report on Internal Control Over Financial Reporting

Management's report on the company's internal control over financial reporting as of December 31, 2024 is included on page 54 of Part II, Item 8 "Financial Statements and Supplementary Data." The effectiveness of the company's internal control over financial reporting as of December 31, 2024 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm. Their report appears on pages 55 -56 of Part II, Item 8 "Financial Statements and Supplementary Data."

Changes in Internal Control over Financial Reporting

During the last fiscal quarter, there has been no significant change in the company's internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

Item 9B. Other Information.

During the three months ended December 31, 2024, none of the company's directors or officers (as defined in Rule 16a-1(f) of the Securities Exchange Act of 1934) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K of the Securities Act of 1933).

Disclosure Required Pursuant to Section 13(r) of the Securities Exchange Act of 1934

Caterpillar maintains a portfolio of trademarks in Iran, which it registers with the Intellectual Property Center of the Islamic Republic of Iran (IPC), through intellectual property counsel and service providers located in United Arab Emirates and Iran. On November 30, 2023, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") granted Caterpillar a specific license to make payments to IPC at its account in Bank Melli, which was designated on November 5, 2018, by OFAC under its counter terrorism authority pursuant to Executive Order 13224. As authorized by OFAC's specific license, in the period ended December 31, 2024, Caterpillar paid approximately \$608 to IPC as part of its intellectual property protection efforts in Iran. Caterpillar plans to continue these activities, as authorized under the specific license, and does not generate any revenues or profits from this activity.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not Applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Identification of Directors and Business Experience

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Identification of Executive Officers and Business Experience

Information required by this Item appears in Item 1D of this Form 10-K.

Family Relationships

There are no family relationships between the officers and directors of the company.

Legal Proceedings Involving Officers and Directors

If applicable, information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Audit Committee Financial Expert

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Identification of Audit Committee

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Shareholder Recommendation of Board Nominees

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Compliance with Section 16(a) of the Exchange Act

If applicable, information required by this Item relating to compliance with Section 16(a) of the Exchange Act is incorporated by reference from the 2025 Proxy Statement.

Code of Ethics

Our Worldwide Code of Conduct (Code), first published in 1974 and most recently updated in 2019, sets a high standard for honesty and ethical behavior by every director and employee, including the principal executive officer, principal financial officer and principal accounting officer. The Code is posted on our website at www.Caterpillar.com/code. To obtain a copy of the Code at no charge, submit a written request to the Corporate Secretary at 5205 N. O'Connor Boulevard, Suite 100, Irving, TX 75039. We post on our website at www.Caterpillar.com/code any required amendments to or waivers granted under our Code pursuant to SEC or New York Stock Exchange disclosure rules.

Insider Trading Laws and Policies

From time to time, the Company may engage in transactions in its own securities. It is the Company's policy to comply with all applicable securities and state laws (including appropriate approvals by the Board of Directors or appropriate committee, if required) when engaging in transactions in Company securities.

The other information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Item 11. Executive Compensation.

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information required by this Item relating to security ownership of certain beneficial owners and management is incorporated by reference from the 2025 Proxy Statement.

Information required by this Item relating to securities authorized for issuance under equity compensation plans is included in the following table:

Equity Compensation Plan Information
(as of December 31, 2024)

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted- average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	5,593,907	\$ 195.28	40,873,176
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	5,593,907	\$ 195.28	40,873,176

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

Item 14. Principal Accountant Fees and Services.

Our independent registered public accounting firm is PricewaterhouseCoopers LLP, Dallas, Texas, Auditor Firm ID: 238.

Information required by this Item is incorporated by reference from the 2025 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

Exhibits:

- 3.1 [Restated Certificate of Incorporation, effective February 3, 2021 \(incorporated by reference from Exhibit 3.2 to the Company's Form 8-K filed February 9, 2021\)](#)
- 3.2 [Bylaws amended and restated as of June 8, 2022 \(incorporated by reference from Exhibit 3.1 to the Company's Current Report on Form 8-K filed June 14, 2022\)](#)
- 4.1 [Indenture dated as of May 1, 1987, between Caterpillar Inc. and The First National Bank of Chicago, as Trustee \(incorporated by reference from Exhibit 4.1 to Form S-3 filed February 19, 1997\)](#)
- 4.2 [First Supplemental Indenture, dated as of June 1, 1989, between Caterpillar Inc. and The First National Bank of Chicago, as Trustee \(incorporated by reference from Exhibit 4.2 to Form S-3 filed February 19, 1997\)](#)
- 4.3 [Appointment of Citibank, N.A. as Successor Trustee, dated October 1, 1991, under the Indenture, as supplemented, dated as of May 1, 1987 \(incorporated by reference from Exhibit 4.3 to Form S-3 filed February 19, 1997\)](#)
- 4.4 [Second Supplemental Indenture, dated as of May 15, 1992, between Caterpillar Inc. and Citibank, N.A., as Successor Trustee \(incorporated by reference from Exhibit 4.4 to Form S-3 filed February 19, 1997\)](#)
- 4.5 [Third Supplemental Indenture, dated as of December 16, 1996, between Caterpillar Inc. and Citibank, N.A., as Successor Trustee \(incorporated by reference from Exhibit 4.5 to Form S-3 filed February 19, 1997\)](#)
- 4.6 [Tri-Party Agreement, dated as of November 2, 2006, between Caterpillar Inc., Citibank, N.A. and U.S. Bank National Association appointing U.S. Bank as Successor Trustee under the Indenture dated as of May 1, 1987, as amended and supplemented \(incorporated by reference from Exhibit 4.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2006\)](#)
- 4.7 [Form of 3.803% Rule 144A Global Debenture due 2042 \(incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, filed August 28, 2012\)](#)
- 4.8 [Form of 3.803% Regulation S Global Debenture due 2042 \(incorporated by reference from Exhibit 4.2 to Form 8-K, filed August 28, 2012\)](#)
- 4.9 [Form of 3.803% Global Debenture due 2042 \(incorporated by reference from Exhibit 4.9 to Form S-4 filed on September 7, 2012\)](#)
- 4.10 [Form of 3.40% Senior Note due 2024 \(incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on May 8, 2014\)](#)
- 4.11 [Form of 4.30% Senior Note due 2044 \(incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on May 8, 2014\)](#)
- 4.12 [Form of 4.75% Senior Note due 2064 \(incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K, filed on May 8, 2014\)](#)
- 4.13 [Form of 2.600% Senior Note due 2029 \(incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed September 19, 2019\)](#)
- 4.14 [Form of 3.250% Senior Note due 2049 \(incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed September 19, 2019\)](#)
- 4.15 [Form of 2.600% Senior Notes due 2030 \(incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed April 9, 2020\)](#)
- 4.16 [Form of 3.250% Senior Notes due 2050 \(incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed April 9, 2020\)](#)
- 4.17 [Form of 1.900% Senior Notes due 2031 \(incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed March 12, 2021\)](#)
- 4.18 [Description of Securities \(incorporated by reference from Exhibit 4.16 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019\)](#)
- 10.1 [Caterpillar Inc. 2023 Long-Term Incentive Plan \(incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed June 20, 2023\)*](#)
- 10.2 [Form of Restricted Stock Unit Award pursuant to the 2023 Long-Term Incentive Plan \(incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024\)*](#)
- 10.3 [Form of Restricted Stock Unit Award for Directors pursuant to the 2023 Long-Term Incentive Plan \(incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024\)*](#)

10.4	Form of Nonqualified Stock Options Award pursuant to the 2023 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024)*
10.5	Form of Performance-Based Restricted Stock Unit Award pursuant to the 2023 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024)*
10.6	Form of Nonqualified Stock Options Award pursuant to the 2023 Long-Term Incentive Plan (China Payroll Addendum) (incorporated by reference from Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2023)*
10.7	Caterpillar Inc. Supplemental Retirement Plan (formerly known as the Caterpillar Inc. Supplemental Pension Benefit Plan), amended and restated effective January 1, 2020 (incorporated by reference from Exhibit 10.17 to the Company's Annual report on Form 10-K for the year ended December 31, 2020)*
10.8	First Amendment to the Caterpillar Inc. Supplemental Retirement Plan, effective January 1, 2022 (incorporated by reference from Exhibit 10.17 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*
10.9	Second Amendment to the Caterpillar Inc. Supplemental Retirement Plan, effective July 1, 2022 (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)*
10.10	Caterpillar Inc. Supplemental Employees' Investment Plan, amended and restated as of May 15, 2017 (incorporated by reference from Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017)*
10.11	First Amendment to the Caterpillar Inc. Supplemental Employees' Investment Plan, effective as of July 24, 2017 (incorporated by reference from Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017)*
10.12	Second Amendment to the Caterpillar Inc. Supplemental Employees' Investment Plan, dated December 14, 2018 (incorporated by reference from Exhibit 10.22 to the Company's Annual Report on Form 10-K for the year ended December 31, 2018)*
10.13	Third Amendment to the Caterpillar Inc. Supplemental Employees' Investment Plan, effective January 1, 2022 (incorporated by reference from Exhibit 10.21 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*
10.14	Fourth Amendment to the Caterpillar Inc. Supplemental Employees' Investment Plan, effective as of July 1, 2022 (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)*
10.15	Caterpillar Inc. Directors' Deferred Compensation Plan, as amended and restated effective July 1, 2018 (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018)*
10.16	First Amendment to the Caterpillar Inc. Directors' Deferred Compensation Plan dated January 22, 2019 (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019)*
10.17	Second Amendment to the Caterpillar Inc. Directors' Deferred Compensation Plan, effective as of July 1, 2022 (incorporated by reference from Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)*
10.18	Caterpillar Inc. Directors' Charitable Award Program, as amended and restated effective April 1, 2008 (incorporated by reference from Exhibit 10.7 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008)*
10.19	Caterpillar Inc. Deferred Employees' Investment Plan amended and restated as of May 15, 2017 (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017)*
10.20	First Amendment to the Caterpillar Inc. Deferred Employees' Investment Plan, effective as of July 24, 2017 (incorporated by reference from Exhibit 10.26 to the Company's Annual Report on Form 10-K for the year ended December 31, 2018)*
10.21	Second Amendment to the Caterpillar Inc. Deferred Employees' Investment Plan, dated December 14, 2018 (incorporated by reference from Exhibit 10.27 to the Company's Annual Report on Form 10-K for the year ended December 31, 2018)*
10.22	Third Amendment to the Caterpillar Inc. Deferred Employees' Investment Plan, effective as of January 1, 2022 (incorporated by reference from Exhibit 10.28 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*
10.23	Fourth Amendment to the Caterpillar Inc. Deferred Employees' Investment Plan, effective as of July 1, 2022 (incorporated by reference from Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)*

10.24	<u>Caterpillar Inc. Supplemental Deferred Compensation Plan amended and restated as of May 15, 2017 (incorporated by reference from Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017)*</u>
10.25	<u>First Amendment to the Caterpillar Inc. Supplemental Deferred Compensation Plan, effective as of July 24, 2017 (incorporated by reference from Exhibit 10.28 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017)*</u>
10.26	<u>Second Amendment to the Caterpillar Inc. Supplemental Deferred Compensation Plan, dated December 14, 2018 (incorporated by reference to Exhibit 10.30 to the Company's Annual Report on Form 10-K for the year ended December 31, 2018)*</u>
10.27	<u>Third Amendment to the Caterpillar Inc. Supplemental Deferred Compensation Plan effective January 1, 2019 (incorporated by reference from Exhibit 10.32 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019)*</u>
10.28	<u>Fourth Amendment to the Caterpillar Supplemental Deferred Compensation Plan, effective as of January 1, 2022 (incorporated by reference from Exhibit 10.33 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*</u>
10.29	<u>Fifth Amendment to the Caterpillar Inc. Supplemental Deferred Compensation Plan, effective as of July 1, 2022 (incorporated by reference from Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)*</u>
10.30	<u>Solar Turbines Incorporated Managerial Retirement Objective Plan, as amended and restated through First Amendment, dated December 10, 2014 (incorporated by reference from Exhibit 10.19 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014)*</u>
10.31	<u>Second Amendment to the Solar Turbines Incorporated Managerial Retirement Objective Plan, effective January 1, 2022 (incorporated by reference from Exhibit 10.35 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*</u>
10.32	<u>Solar Turbines Incorporated Pension Plan for European Foreign Service Employees, as amended and restated, effective January 1, 2015 (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)*</u>
10.33	<u>First Amendment to the Solar Turbines Incorporated Pension Plan for European Foreign Service Employees effective January 1, 2020 (incorporated by reference from Exhibit 10.35 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019)*</u>
10.34	<u>Second Amendment to the Solar Turbines Incorporated Pension Plan for European Foreign Service Employees effective January 1, 2022 (incorporated by reference from Exhibit 10.38 to the Company's Annual Report on Form 10-K for the year ended December 31, 2021)*</u>
10.35	<u>Revised Letter Agreement by and between Caterpillar Inc. and Andrew Bonfield dated August 28, 2018 (incorporated by reference from Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018)*</u>
10.36	<u>Mercer Super Trust CatSuper Special Arrangement Agreement between Caterpillar of Australia PTY LTD and Robert Brian Charter dated June 26, 2007 (incorporated by reference from Exhibit 10.38 to the Company's Annual Report on Form 10-K filed on February 14, 2019)*</u>
10.37	<u>Mercer Super Trust CatSuper Special Arrangement Agreement, by and between Caterpillar of Australia PTY LTD. and Robert Brian Charter dated April 4, 2018 (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018)*</u>
10.38	<u>Time Sharing Agreement dated January 10, 2017 (incorporated by reference from Exhibit 10.29 to the Company's Annual Report on Form 10-K filed December 31, 2016)*</u>
10.39	<u>Credit Agreement (2024 364-Day Facility), dated August 29, 2024, among Caterpillar Inc., Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company, and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as agent, Citibank Europe PLC, UK Branch, as Local Currency Agent, and MUFG Bank, Ltd. as Japan Local Currency Agent (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on September 4, 2024)</u>
10.40	<u>Local Currency Addendum to the 2024 364-Day Facility dated August 29, 2024, among Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A., as Agent, and Citibank Europe plc, UK Branch, as Local Currency Agent (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed September 4, 2024)</u>
10.41	<u>Japan Local Currency Addendum, dated as of August 29, 2024, to the Credit Agreement (2024 364-Day Facility) (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K filed September 4, 2024)</u>

10.42	<u>Third Amended and Restated Credit Agreement (3-Year Facility) dated September 1, 2022, among the Company, Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as Agent, Citibank Europe plc, UK Branch, as Local Currency Agent, and MUFG Bank, LTD., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed September 6, 2022)</u>
10.43	<u>Local Currency Addendum to the 3-Year Facility dated September 1, 2022, among Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A., as Agent, and Citibank Europe plc, UK Branch, as Local Currency Agent (incorporated by reference from Exhibit 10.5 to the Company's Current Report on Form 8-K filed September 6, 2022)</u>
10.44	<u>Japan Local Currency Addendum to the 3-Year Facility dated September 1, 2022, among Caterpillar Financial Services Corporation, Caterpillar Finance Kabushiki Kaisha, the Japan Local Currency Banks named therein, Citibank, N.A., as Agent, and MUFG Bank, Ltd., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.6 to the Company's Current Report on Form 8-K filed September 6, 2022)</u>
10.45	<u>Amendment No. 1 to Third Amended and Restated Credit Agreement (3-Year Facility) dated August 31, 2023 (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed September 1, 2023)</u>
10.46	<u>Amendment No. 2 to Third Amended and Restated Credit Agreement (3-Year Facility) dated August 29, 2024 (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed September 4, 2024)</u>
10.47	<u>Third Amended and Restated Credit Agreement (5-Year Facility) dated September 1, 2022, among the Company, Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company and Caterpillar Finance Kabushiki Kaisha, certain financial institutions named therein, Citibank, N.A., as Agent, Citibank Europe plc, UK Branch, as Local Currency Agent, and MUFG Bank, LTD., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.7 to the Company's Current Report on Form 8-K filed September 6, 2022)</u>
10.48	<u>Local Currency Addendum to the Five-Year Facility dated September 1, 2022, among Caterpillar Financial Services Corporation, Caterpillar International Finance Designated Activity Company, the Local Currency Banks named therein, Citibank, N.A., as Agent, and Citibank Europe plc, UK Branch, as Local Currency Agent (incorporated by reference from Exhibit 10.8 to the Company's Current Report on Form 8-K, filed September 6, 2022)</u>
10.49	<u>Japan Local Currency Addendum to the 5-Year Facility dated September 1, 2022, among Caterpillar Financial Services Corporation, Caterpillar Finance Kabushiki Kaisha, the Japan Local Currency Banks named therein, Citibank, N.A., as Agent, and MUFG Bank, Ltd., as Japan Local Currency Agent (incorporated by reference from Exhibit 10.9 to the Company's Current Report on Form 8-K, filed September 6, 2022)</u>
10.50	<u>Amendment No. 1 to Third Amended and Restated Credit Agreement (5-Year Facility) dated August 31, 2023 (incorporated by reference from Exhibit 10.5 to the Company's Current Report on Form 8-K filed September 1, 2023)</u>
10.51	<u>Amendment No. 2 to Third Amended and Restated Credit Agreement (5-Year Facility) dated August 31, 2024 (incorporated by reference from Exhibit 10.5 to the Company's Current Report on Form 8-K filed September 4, 2024)</u>
10.52	<u>Caterpillar Inc. 2014 Long-Term Incentive Plan, amended and restated effective October 8, 2019 (incorporated by reference from Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2019)*</u>
10.53	<u>First Amendment to Caterpillar Inc. 2014 Long-Term Incentive Plan, effective July 1, 2022 (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022)</u>
10.54	<u>Form of Restricted Stock Unit Award pursuant to the 2014 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*</u>
10.55	<u>Form of Restricted Stock Unit Award for Directors pursuant to the 2014 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*</u>
10.56	<u>Form of Nonqualified Stock Options Award pursuant to the 2014 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*</u>

10.57	Form of Performance-Based Restricted Stock Unit Award pursuant to the 2014 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2023)*
19	Caterpillar Inc. Insider Trading Policy (as adopted January 30, 2025)
21	Subsidiaries and Affiliates of the Registrant
23	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer of Caterpillar Inc., pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer of Caterpillar Inc., pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification of Chief Executive Officer of Caterpillar Inc. and Chief Financial Officer of Caterpillar Inc., pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
97	Caterpillar Inc. Incentive Compensation Clawback Policy (as adopted October 11, 2023)
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are imbedded within the Inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive File (embedded within the Inline XBRL document and included in Exhibit 101)

*Management contracts and compensatory plans and arrangements required to be filed as exhibits pursuant to Item 15(b) of this report.

The agreements and other documents filed as exhibits to this report are not intended to provide factual information or other disclosure other than with respect to the terms of the agreements or other documents themselves, and you should not rely on them for that purpose. In particular, any representations and warranties made by us in these agreements or other documents were made solely within the specific context of the relevant agreement or document and may not describe the actual state of affairs as of the date they were made or at any other time.

Item 16. Form 10-K Summary.

None.

Form 10-K

SIGNATURES

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

CATERPILLAR INC.

Registrant

February 14, 2025

By:

/s/ Derek Owens

Derek Owens

Chief Legal Officer and General Counsel

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

February 14, 2025

/s/ D. James Umpleby III

D. James Umpleby III

Chairman of the Board
and Chief Executive Officer

February 14, 2025

/s/ Andrew R.J. Bonfield

Andrew R.J. Bonfield

Chief Financial Officer

February 14, 2025

/s/ William E. Schaupp

William E. Schaupp

Vice President and
Chief Accounting Officer

February 14, 2025

/s/ Daniel M. Dickinson

Daniel M. Dickinson

Director

February 14, 2025

/s/ James C. Fish, Jr.

James C. Fish, Jr.

Director

February 14, 2025	<i>/s/ Gerald Johnson</i> Gerald Johnson	Director
February 14, 2025	<i>/s/ Nazzic S. Keene</i> Nazzic S. Keene	Director
February 14, 2025	<i>/s/ David W. MacLennan</i> David W. MacLennan	Director
February 14, 2025	<i>/s/ Judith F. Marks</i> Judith F. Marks	Director
February 14, 2025	<i>/s/ Debra L. Reed-Klages</i> Debra L. Reed-Klages	Presiding Director
February 14, 2025	<i>/s/ Susan C. Schwab</i> Susan C. Schwab	Director
February 14, 2025	<i>/s/ Rayford Wilkins, Jr.</i> Rayford Wilkins, Jr.	Director